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# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 - (217) 782-3397

JAMES R. THOMPSON CENTER, 100 WEST RANDOLPH, SUITE 11-300, CHICAGO, IL 60601 - (312) 814-6026

217/524-3300

ROD R. BLAGOJEVICH, GOVERNOR

DOUGLAS P. SCOTT, DIRECTOR

April 23, 2007

Certified Mail

7004 2510 0001 8616 6119

Citgo Lemont Refinery  
Attn: Environmental Coordinator  
135th & New Ave.  
Lemont, Illinois 60439

US EPA RECORDS CENTER REGION 5



1000831

Re: 1978030004 -- Lake County  
CITGO Petroleum Corp.  
ILD041550567  
RCRA Permit

Dear Environmental Coordinator:

The Illinois EPA and the United States Environmental Protection Agency (U.S. EPA) have compiled a list of all facilities deemed appropriate and important to address using the Resource Conservation and Recovery Act's (RCRA) Corrective Action Program. Because this set of 3,880 facilities has national remediation goals which will culminate in the year 2020, it is referred to as the 2020 Corrective Action Universe. Your facility is part of this 2020 Universe.

As a result, a final remedy needs to be in place (i.e., remedy construction completed) at your facility by 2020 (although actual attainment of cleanup goals through remedy implementation may take a while longer). If we have not already done so, we will be working with you to develop a plan and a schedule that achieves this goal before 2020.

Your facility has been included in the 2020 Universe because one or more of the following is true:

- It has a RCRA permit obligation,
- Illinois EPA and U.S. EPA agreed that it needs to be addressed under the RCRA Corrective Action Program, as it at one time operated a hazardous waste management unit subject to the interim status or permit requirements of RCRA.

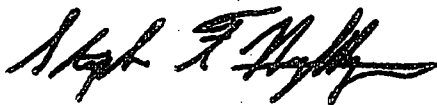
Inclusion on this list does not imply failure on your part to meet any legal obligation, nor should it be construed as an adverse action against you. It only means that Illinois EPA and U.S. EPA have identified your facility – and every other facility in the 2020 Universe – as needing to complete RCRA Corrective Action if they have not done so already. Our national program goal is to address these cleanup obligations before the end of 2020. Accordingly, progress will be tracked for each facility in the 2020 Universe. The list of facilities will be posted on our web site at <http://www.epa.gov/correctiveaction> in the near future.

ROCKFORD – 4302 North Main Street, Rockford, IL 61103 – (815) 987-7760 • DES PLAINES – 9511 W. Harrison St., Des Plaines, IL 60016 – (847) 294-4000  
ELGIN – 595 South State, Elgin, IL 60123 – (847) 608-3131 • PEORIA – 5415 N. University St., Peoria, IL 61614 – (309) 693-5463  
BUREAU OF LAND – PEORIA – 7620 N. University St., Peoria, IL 61614 – (309) 693-5462 • CHAMPAIGN – 2125 South First Street, Champaign, IL 61820 – (217) 278-5800  
SPRINGFIELD – 4500 S. Sixth Street Rd., Springfield, IL 62706 – (217) 786-6892 • COLLINSVILLE – 2009 Mall Street, Collinsville, IL 62234 – (618) 346-5120  
MARION – 2309 W. Main St., Suite 116, Marion, IL 62959 – (618) 993-7200

Illinois EPA will work to address remediation concerns at your facility in a manner consistent with your plans for the property. There are a variety of options available for completing the required remediation efforts at your facility, ranging from participation in Illinois EPA's Site Remediation Program to establishment of an Administrative Order on Consent with USEPA under Section 3008(h) of RCRA.

Illinois EPA would like to schedule a meeting with you in the near future to discuss remedial activities at your facility and achievement of the goal mentioned in the second paragraph of this letter. Please contact James K. Moore, P.E. of my staff at 217/524-3295 if you have any questions regarding this letter and to schedule a meeting to discuss the contents of this letter.

Sincerely,

A handwritten signature in black ink, appearing to read "Stephen F. Nightingale", with a stylized flourish at the end.

Stephen F. Nightingale, P.E.  
Manager, Permit Section  
Bureau of Land

SFN:JKM:bjh\072572s.dot

cc: Hak Cho, USEPA, Region 5

05/09/2000 10:42 AM

Hi everyone,

**We also need to have our interim report ready for the briefing. For the interim report, I will need each of you to write a paragraph or so generally describing what you looked at, and a list of findings (same 3 categories as above) in bullet form. This is generally about 1-2 pages double-spaced for each program so it isn't a very time-consuming task.**

Thanks,  
Kathy

No SC  
 More are budget cooking  
 Sprinch Cooke  
 System

Katherine Keith

02/01/2000 03:05 PM

To: Andre Daugavietis, Loren Denton, Vivian Doyle, Gerald Golubski, GEORGE OPEK, Entzminger.James, Patric M

Subject: Follow-up to our meeting

Updated phone list attached

Dea, if you have any questions about what's going on after reading this, please let me know. Citgo is also on the list for the HQ initiative. The address of the refinery is:

Citgo

Lemont Refinery

135th Street and New Avenue

Lemont, Illinois 60439-3659

----- Forwarded by Katherine Keith/R5/USEPA/US on 02/01/2000 03:02 PM -----

Katherine Keith

02/01/2000 01:20 PM

To: Andre Daugavietis, Loren Denton, Vivian Doyle, Gerald Golubski, GEORGE OPEK, Entzminger.James, Patric M

Subject: Follow-up to our meeting

As promised during our meeting, here is the Citgo schedule, our phone list, and copies of the pre-inspection document request. Please note that I added some additional milestones in the schedule so read it carefully and let me know if there is any that seems impossible. Also, let me know if there is something that you don't understand in the schedule.

#### Phone List

Water	Gerry Golubski	32256
RCRA	George Opek	61423
EPCRA non-313/CERCLA	Jim Entzminger	64062
EPCRA 313/TSCA/FIFRA	Dea Zimmerman	36344
ORC	Andre Daugavietis	66663
Air	Loren Denton	66814
	Vivian Doyle	37996
	Patric McCoy	66869
	Kathy Keith	36956

#### Tentative Inspection/Referral Schedule

State file review/pre-inspection info request	As Needed
Inspection document request lists to Kathy	March 9
Pre-inspection team meeting	March 16
Notify Citgo and IEPA/send document request	March 20
INSPECTION	March 27 - April 7
RCRA/Air/Screening Inspections	week of March 27
Water/Air/Screening Inspections	week of April 3
Post-inspection info request	by April 14
Summary of Inspection Findings to Kathy	April 21
TSD to ORC	June 1
Individual inspection reports to Kathy for assembly	June 15



Citgo

Katherine Keith

02/01/2000 01:20 PM

To: Andre Daugavietis, Loren Denton, Vivian Doyle, Gerald Golubski, GEORGE OPEK, Entzminger, James, Patric M

Subject: Follow-up to our meeting

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TSD to ORC	June 1
Individual inspection reports to Kathy for assembly	June 15
Referral	June 30

#### Document Request

As we discussed today, a document request will be sent to Citgo with the written inspection notification on March 16. This list is intended to be a list of documents that we want Citgo to have available for us to review during the inspection (as opposed to copies for us to take). Attached are the document requests that were used for Murphy, Marathon Detroit, and Koch. I think each one is a little different so please look at them all and add/delete/combine to come up with your own list of documents that you want to review during the inspection. I will assemble the individual lists into one document. We will ask for the documents from 1/1/97 through the present, unless you specify otherwise.



docreq.wp



docreq2.wp



doc.req

Let me know if you have any questions.  
Kathy

Katherine Keith

01/25/2000 08:35 AM

To: GEORGE OPEK

Subject: Re: Citgo multimedia inspection

George,

Here is the address of the Citgo refinery. I was hoping that during the meeting next week we would decide as a group when to conduct the inspection.

If there is anything else you need, let me know.

Kathy

----- Forwarded by Katherine Keith/R5/USEPA/US on 01/25/2000 08:33 AM -----



Loren Denton

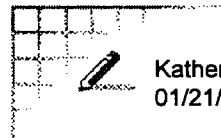
01/21/2000 11:33 AM



To: Katherine Keith

CITGO Petroleum Corporation  
Lemont Refinery  
135th Street and New Avenue  
Lemont, Illinois 60439-3659  
Katherine Keith

LD # 041 550 567



Katherine Keith

01/21/2000 11:13 AM

To: Loren Denton

Subject: Re: Citgo multimedia inspection

Loren,

Do you have the address for Citgo?

Thanks,

Kathy

----- Forwarded by Katherine Keith/R5/USEPA/US on 01/21/2000 11:12 AM -----

Louis Sass

01/20/2000 02:16 PM

To: Katherine Keith

please give me the address of the citgo facility and i'll have the state program manager find out if there are any usts

Katherine Keith

Katherine Keith

01/20/2000 02:03 PM

Referral

June 30

### **Document Request**

As we discussed today, a document request will be sent to Citgo with the written inspection notification on March 16. This list is intended to be a list of documents that we want Citgo to have available for us to review during the inspection (as opposed to copies for us to take). Attached are the document requests that were used for Murphy, Marathon Detroit, and Koch. I think each one is a little different so please look at them all and add/delete/combine to come up with your own list of documents that you want to review during the inspection. I will assemble the individual lists into one document. We will ask for the documents from 1/1/97 through the present, unless you specify otherwise.



docreq.wp



docreq2.wp



doc.req

Let me know if you have any questions.

Kathy

3/27/2000

CITGO REFINERY  
PRE-MEETING

ATTENDEES

MARCUS HATCH	IEPA	(708) 338-7864
Loren Denton	USEPA	(312) 886-6814
Andre Danyushtis	U.S. EPA	(312) 886-6663
GEORGE OPEK	U.S. EPA	(312) 886-1423
RIZAL JIMENEZ	IEPA	(708) 338-7887
Vivian Doyle	USEPA	(312) 353-7996
Gerzy Golubski	USEPA	(312) 353-2256
Ahmad Abulaban	IEPA	708/338-7900
BRAD Benning	USEPA	312/353-7613
Patricia Moore	CITGO	(630) 257-4029
Kevin Moss	CITGO	630 257-4452
MAZ KLICKMAN	CITGO	630/257-4308
Dana Burch	CITGO	918-495-5548
MARK KOWALCZYK	CITGO	630-257-4306
CLAUDE HAMMON	CITGO	630-257-4450 <sup>PAUL</sup> 708-988-7680
Lee Erchull	"	630-257-4329
PICO VALLEJERA	IEPA	708/338-7866
Richard Olson	CITGO	(630) 257-4021
Kathy Keith	USEPA	312-353-6956



**No. 468299** 5HW-13  
Dolan

**RECEIPT FOR CERTIFIED MAIL**  
NO INSURANCE COVERAGE PROVIDED—  
NOT FOR INTERNATIONAL MAIL  
(See Reverse)

SENT TO Mr. H.D. Haas  
Union Oil Co. of Calif.  
STREET AND NO. Chicago Refinery  
135th Street & New Ave.  
P.O., STATE AND ZIP CODE  
Lemont, Illinois 60439

POSTAGE	\$
CERTIFIED FEE	¢
SPECIAL DELIVERY	¢
RESTRICTED DELIVERY	¢
OPTIONAL SERVICES	
RETURN RECEIPT SERVICE	¢
SHOW TO WHOM AND DATE DELIVERED	¢
SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	¢
SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	¢
SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	¢
TOTAL POSTAGE AND FEES	\$
POSTMARK OR DATE	

PS Form 3800, Apr. 1976

Union Oil Company of California  
Chicago Refinery  
135th Street & New Ave.  
Lemont, Illinois 60439

PS Form 3811, Jan. 1975

ILD 041550567 Part B

● SENDER: Complete items 1, 2, and 3.  
Add your address in the "RETURN TO" space on reverse.

1. The following service is requested (check one).  
☒ Show to whom and date delivered..... 15¢  
☐ Show to whom, date, & address of delivery.. 35¢  
☐ RESTRICTED DELIVERY.  
 Show to whom and date delivered..... 65¢  
☐ RESTRICTED DELIVERY.  
 Show to whom, date, and address of delivery 85¢

2. ARTICLE ADDRESSED TO: Mr. H.D. Haas  
Union Oil Company of California  
Chicago Refinery  
135th Street & New Avenue  
Lemont, Illinois 60439

3. ARTICLE DESCRIPTION:  
 REGISTERED NO. | CERTIFIED NO. | INSURED NO.  
 | 468299 |  
 (Always obtain signature of addressee or agent)

I have received the article described above.  
 SIGNATURE ☐ Addressee ☐ Authorized agent

4. DATE OF DELIVERY  
11-17-83

5. ADDRESS (Complete only if requested)

6. UNABLE TO DELIVER BECAUSE:

INITIALS

☆ GPO: 1975-O-568-047



B-162

USEPA



February 13, 1997

a heidemij company

Mr. Robert Watson  
Illinois Environmental Protection Agency  
2200 Churchill Road  
Springfield, Illinois 62794-9276

Re: Unocal Conference Call  
February 4, 1997

Dear Mr. Watson;

Enclosed is a summary of the conference call held on February 4, 1997 for your review and comment. If you disagree with the meeting summary, please contact either Mr. Thomas Hall of Unocal Corporation at 847-310-6806 or myself at 312-263-6703 at your earliest convenience to resolve any issues.

Sincerely,

GERAGHTY & MILLER, INC.

Martin J. Hamper  
Project Manager

Enclosure: Conference Call Summary



cc: Tom Hall                      Joel Garretson  
Norm Berger                  Kevin Moss  
Claude Harmon              Nick Nedeau  
Rob Watson                  Jerry Kuhn





### TELEPHONE CONVERSATION RECORD

Date: Feb. 4, 1997 Time: 9:30 AM Project No.: CI0487.004

Conferees: Rob Watson IEPA Tom Hall Unocal

Jerry Kuhn IEPA Martin Hamper Geraghty & Miller

Prepared by Martin Hamper

RE: Unocal UNO- Draft Permit  
Comments VEN

The purpose of this call was to discuss the schedule for final permit issuance and the status of the IEPA's review of Unocal's comments on the UNO-VEN draft permit. The IEPA representatives were asked if they had had an opportunity to review Unocal's comments on the UNO-VEN draft permit. The IEPA responded that they had reviewed UNO-VEN's comments and but had not yet reviewed Unocal's comments. The IEPA stated that they have tried to address Unocal's concerns by deferring closure (and a decision on the type of cap) until a final decision on the CAMU is made, and removing the cover requirements outlined in the draft permit from the final permit.

The IEPA indicated that the final permit will require the submission of a closure plan at a later date. If a CAMU is approved, the closure plan would be submitted some number of days before closure of the CAMU is expected so that the closure can be tailored to the conditions that exist at the CAMU at that time. If the CAMU is not approved, then the permit would require the submission of a closure plan (and justification for the closure plan) something like 120 days after the CAMU denial decision is made. Unocal would be able to submit one of the alternative closure plans which are included in their comments to the draft permit. The IEPA was not sure if the decision on the closure plan would be a permit modification or simply an approval letter from the IEPA.

The IEPA plans to issue the final permit no later than March 31, 1997. Both Unocal and UNO-VEN will have about seven to ten days to review the permit before it is issued.

The mechanism for approval of a CAMU at the land treatment facility will be through a Class III permit modification. The IEPA anticipates that UNO-VEN will submit a Class III permit modification request no earlier than April 1, 1997. The IEPA does not want UNO-VEN to submit the Class III request until the final permit has been issued. If the Class III modification looks like it will be approved, the IEPA will give UNO-VEN temporary authorization to begin maintenance and treatment demonstration development activities prior to issuance of a final permit modification. Such temporary authorization could occur in Summer 1997. The temporary authorization will not allow the full-scale use of the CAMU. The IEPA estimated that the Class III final decision would likely come no sooner than December 1997. The IEPA envisions a two-phased process in approving the CAMU for full scale use. First, UNO-VEN will conduct a land treatment demonstration. If the demonstration is successful, then the IEPA will modify the permit to allow for full-scale use of the CAMU. If the demonstration is not successful, then the CAMU will be denied and a closure plan must be submitted.

Because the IEPA has not yet reviewed Unocal's comments, other issues raised in Unocal's comments were not discussed. The IEPA will call Tom Hall after they have reviewed the comments to discuss them.

Tom Hall explained a little about Unocal's relationship with UNO-VEN. UNO-VEN is a joint venture between Unocal and the Petroleos de Venezuela S.A. (PDVSA). The IEPA was informed that Unocal recently announced plans to spin off its fifty-percent interest in UNO-VEN. The closure of the sale should be completed by March 31, 1997. When asked if UNO-VEN would become CITGO, Tom did not know. The IEPA commented that there are required notices that must be made to the IEPA at transfer of ownership. Unocal indicated that if paperwork for ownership transfer is required, it would likely be handled by the new management of UNO-VEN. Unocal's future role is uncertain. It may or may not have continuing financial responsibility for the landfarm closure and monitoring. In addition, Unocal's level of participation in the RCRA corrective action activities is subject to the final terms of the sale agreement.

The IEPA will respond to all of the comments, but was not sure how to respond to the December 31, 1997 letter from Geraghty & Miller that provided information requested in previous IEPA technical review. The IEPA requested that Unocal send a letter clarifying that the information transmitted in a letter to the IEPA on December 31, 1996, should be considered comments on the draft permit. The IEPA also requested a copy of Unocal's draft permit comments on computer disk. Unocal agreed to provide both the letter and their comments on disk (not including the exhibits). These items will be sent to IEPA before February 10, 1997.

cc:	Tom Hall	Joel Garretson
	Norm Berger	Kevin Moss
	Claude Harmon	Nick Nedeau
	Rob Watson	Jerry Kuhn



B-162



OE 162-96

USEPA  
Todd

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED  
P 533 308 685

The UNO-VEN Company  
UNO-VEN Refinery  
135th Street & New Avenue  
Lemont, IL 60439-3659

Telephone (630) 257-7761

December 23, 1996

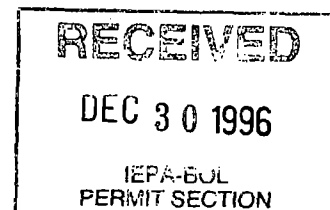
Mr. W. Robert Watson  
Environmental Protection Engineer  
Permit Section  
Division of Land Pollution Control  
2200 Churchill Road, P.O. Box 19276  
Springfield, IL 62794-9276

Minutes from December 6, 1996 Meeting  
The UNO-VEN Company, Chicago Refinery  
Facility LD.#1978030004-RCRA Log. No. B-162

Dear Rob:

This letter summarizes UNO-VEN's understanding of discussion and action items from the meeting held at IEPA's offices in Springfield on 6 December 1996. In attendance were the following:

Rob Watson, IEPA  
Clayton Bloome, IEPA  
Jerry Kuhn, IEPA  
Kevin Moss, UNO-VEN  
Tom Hall, Unocal  
Mark Robbins, Radian/AUS  
Martina Schlauch, Radian/CHI



An agenda was developed for the meeting (attached), and this memo follows the general outline of that agenda. Action items are noted in *italics*.

*Rob Watson indicated that IEPA would like to receive comments to the draft permit in electronic format as well as in hard copy format.*

### Purpose of Meeting

UNO-VEN met with IEPA (agenda item I.) to discuss data that had been assembled to evaluate the potential CAMU site at the Land Treatment Facility (LTF). This data was assembled and presented in the context of the LTF's current status and its ability to continue to treat waste as a CAMU. UNO-VEN also wanted IEPA's opinion on any additional data that it might require to satisfy other concerns regarding the LTF, as well as receive IEPA recommendations on the administrative approach for including the CAMU in the permit. Finally, UNO-VEN wanted to review its corrective action strategy and RFI approach with IEPA and receive feedback.

## **Current Status of the Unit**

To describe the current status of the LTF (agenda item II), Mark Robbins summarized both the vertical and horizontal distribution of constituents at the LTF. Several maps, cross-sections, and tables were used for visual presentation of these data and a complete set of copies was left with IEPA. Data presented was limited to Skinner List constituents.

### Vertical Distribution

Data from two separate investigations (one by ERM and one by Geraghty & Miller) were used to evaluate the vertical distribution of constituents at the LTF. Interpretation of ground surface and the "disturbed"/"undisturbed" soil horizon varied between the two investigations. Radian used the more conservative interpretation in the presentation of the data. Further, the thickness of the 5-foot treatment zone was measured from the existing land surface and not the initial ground surface as prescribed in the U.S. EPA guidance.

The vertical concentrations of organics within the LTF were generally low, with only one organic constituent (bis(2-ethylhexyl)phthalate) detected below the "disturbed" or incorporation zone. However, inorganic constituents were shown to have accumulated over time in various portions of the LTF, and one metal (arsenic) was shown to have moved downward into the "undisturbed" soil. The vertical distribution of arsenic (and other constituents) was discussed in detail. The data evaluation presented indicated only one location where a constituent (arsenic) was indicated to be below the five-foot treatment zone above the established background upper tolerance limits (UTLs). One other location indicated a constituent (bis-2ethyl)hexylphthalate) below the treatment zone but it is believed to be a lab contaminant because none of the overlying soils indicated its presence. For each occurrence of a constituent in the treatment zone and/or below treatment zone soils, a deeper sample interval from the same location indicated that the constituent was not present above background values. There was no indication that constituents had migrated more than 6 ft below the ground surface.

### Horizontal Distribution

The horizontal distribution of constituents was also discussed. In particular the distribution and accumulation of chromium was evaluated. The data indicated that chromium had accumulated in a number of areas but was always restricted to within the first foot of soils. Radian observed that the chromium species present was most certainly the trivalent form, which is known to precipitate and become immobile in soils. These areas of elevated (cumulative) metal concentrations were discussed (which existed in a portion of Area I and Area II), with the understanding that any high-metal wastes to be treated in the CAMU would not be placed in these areas. Elevated metals concentrations horizontally outside of the LTF were discussed and can be attributed to surface runoff. In future CAMU activities, the impacted areas might be removed and placed within the LTF. Run-on/run-off control will prevent future horizontal migration of metal-containing sediments from the LTF areas.

### Groundwater and Lysimeter Data

Although lysimeters were incorrectly installed in the treatment zone (instead of below the treatment zone), lysimeter data was evaluated for an indication of constituent migrations. It was

noted that samples collected did not show significant concentrations of constituents above levels in the "background" lysimeter (outside of the 4 LTF areas). No spikes or peaks of constituents were observed. Rob Watson said that he was concerned about the data because he believed that waste was not applied or tilled directly above the lysimeters during previous operations. He was also concerned with the timing of the sampling events and the implication of this on the data.

Past groundwater monitoring data indicated that no constituent migration to groundwater has occurred.

### **Evaluation of LTF's Ability to Continue to Treat Remediation Wastes**

#### **Toxicity, Leaching, and Waste Restrictions**

This discussion was about Radian's evaluation of the LTF's ability to continue to treat wastes (agenda item III). Because of time limits, it was requested that this evaluation be summarized and not discussed in detail. Based on the available data, there is no reason to believe that the unit is toxic to either plants or microbes. Additionally, it has been observed that the LTF areas are currently supporting natural vegetation, which substantiates the evaluation of the data. Also, as discussed previously in the meeting, it was recognized that there are locations within some of the LTF areas that have accumulated metals from past applications and wastes. While these areas are not a threat to leaching or plant toxicity currently, wastes applied to these areas would be restricted to those with low concentrations of metals.

#### **Monitoring Approach**

Radian summarized UNO-VEN's concept for monitoring the CAMU during operations. The approach includes monitoring of the unsaturated zone (incorporation/disturbed zone, treatment zone, and below treatment zone), utilizing a network of soil core locations and lysimeters, and monitoring of the saturated zone with the upper aquifer groundwater wells. The initial monitoring of the unsaturated zone would consist of the detected Modified Skinner List constituents along with other non-Skinner List constituents (approximately 11) that have been detected at the land farm in previous investigations. UNO-VEN mentioned that some of the non-Skinner constituents appear to be lab contaminants or constituents not common to refinery wastes. IEPA agreed that some of these constituents could be removed from the list in the future if they proved to be lab constituents or of little or no concern. *UNO-VEN will provide this demonstration.* Groundwater analyses would include the typical water quality parameters and for any constituent that has been detected in the below treatment zone soils (e.g. arsenic).

UNO-VEN and IEPA will need to discuss use and monitoring of the existing SW-series monitoring wells in the perched zone.

#### **Additional Data Needs**

Under this item (agenda item IV) the additional data needs for operation of a CAMU were discussed. IEPA representatives indicated that no additional investigation data or evaluation of investigation data was required to proceed with implementation of the CAMU concept. However, IEPA stated that it wanted UNO-VEN to conduct a plot study as part of the first stage of CAMU operation. This study would need to demonstrate the LTF's ability to treat the

remediation wastes prior to IEPA's allowing full scale operations to begin. The timing of this issue was discussed and it was tentatively decided that an interim action could be conducted by UNO-VEN at the first SWMU requiring corrective action and the waste used to conduct the plot study. This initial study would take approximately six months. Additionally, prior to other wastes being applied to the CAMU, UNO-VEN would submit the RFI data for IEPA review as characterization of the remediation wastes. The need for any additional plot studies would be evaluated as implementation of the CAMU proceeds.

A discussion of the eventual closure of the LTF was initiated. Rob Watson stated that in order to close the LTF with a vegetated cap now, the IEPA would need to see an evaluation of migration potential, including modeling, that would demonstrate that the unit would not affect human health or the environment throughout the closure period. *Rob Watson indicated that the evaluation must comply with the Guidance Manual on Hazardous Waste Land Treatment Closure/Post-Closure, 40 CFR 265, which in turn referenced modeling procedures discussed in Permit Guidance Manual on Hazardous Waste Land Treatment Demonstrations.*

*Rob asked for more detail on how the background values were calculated for the LTF (i.e., "show your work"). Rob does not want references to documents regarding methods, rather he wants a step-by-step illustration on how the values were derived (with backup documentation as necessary).*

### **Permit Modification to Include a CAMU**

UNO-VEN asked IEPA representatives how to incorporate the CAMU designation in the permit language (agenda item V). *It was agreed that UNO-VEN would offer alternative language in their comments that would include CAMU as an option to closure.*

*Rob said that UNO-VEN should include the composting option (mentioned in the CAMU concept document previously submitted) in the Class 3 mod. for the CAMU.*

### **Interim Measures**

A discussion of interim measures (agenda item VI) included UNO-VEN's interest in initiating interim measures at the facility, including potential action at one or more SWMUs and at the LTF. Rob Watson suggested his priority for interim measures would be the implementation of run-on/run-off control at the LTF, i.e., silt fences, hay bales, etc., especially around the waste piles in Area 1. *Rob Watson requested, and UNO-VEN agreed, that a workplan be submitted to him in January 1997 outlining proposed interim measures.*

### **Corrective Action Strategy**

After discussion of the LTF, UNO-VEN and Radian spent some time reviewing the "RCRA Corrective Action Strategy and RFI Approach for UNO-VEN SWMUs" with Clayton Bloome (this item was not on the agenda). Rob Watson, Jerry Kuhn, and Tom Hall were not present for

this discussion. In general, Clayton Bloome agreed with UNO-VEN's strategy and approach, which was to divide the SWMUs into three groups and perform a combined Phase I/II for the high priority (Group 1) SWMUs.

The following outlines Clayton Bloome's specific comments to the referenced document and the result of our discussion of each comment.

#### Removal of SWMU 22, SWMU 23D, and SWMU 28

Clayton Bloome agreed that based on a review of existing information, SWMUs 22, 23D, and 28 should be removed from the corrective action SWMU list in the RCRA permit.

#### Removal of SWMUs 41 and 42 (East and West Tank Farms)

Clayton Bloome was not comfortable with removing SWMUs 41/42 because of the potential for past releases from other tanks in the tank farms (besides those already identified in the draft permit as SWMUs). *After discussion, UNO-VEN agreed to conducting a historical literature review of the tank farm areas to identify any past or potential releases from other (non-SWMU) tanks.* With this provision, SWMUs 41 and 42 would be removed.

#### Removal of SWMU 43

Clayton Bloome was concerned about the removal of SWMU 43. UNO-VEN has agreed to rename the SWMU as 43A-I to specifically identify points along the product pipeline that have had documented spills. *UNO-VEN will conduct an assessment and literature search of these areas and any other documented areas along the line during the Group 2 investigation.* With this provision it was agreed that SWMU 43 (Process Lines) would be replaced with SWMUs 43A-I (specific spill areas along the product pipeline).

#### Group 3 SWMUs

Clayton Bloome asked for more specific language regarding UNO-VEN's plans for the Group 3 long-term investigation. *This will be incorporated into the draft permit comments.*

#### SWMUs 10 and 25A-C

Clayton suggested the heat exchanger bundle cleaning pads may require sampling near drains and/or near large cracks, as necessary. UNO-VEN agrees and had incorporated this suggestion in the discussion regarding the pads' integrity inspection and recommendation of corrective action by a registered professional engineer.

#### SWMU 34 Priority

Clayton requested that SWMU 34 be moved from a Group 2 to a Group 1 SWMU. This has been done and will be reflected in the draft permit comments.

Groundwater Evaluation

Clayton Bloome was not comfortable with removing the facility-wide groundwater monitoring approach from the permit. After discussion, it was agreed that after the Group 1, Phase I/II investigation, UNO-VEN would evaluate a modified perimeter groundwater monitoring approach. The results of the Group 1, Phase I/II investigation will provide UNO-VEN with the appropriate information to develop a risk-based appropriate perimeter approach to determine whether additional (post-Group investigation) groundwater monitoring wells are needed to adequately and effectively address site-wide groundwater concerns. a plan for this perimeter approach will be submitted with the Group 2, Phase I workplan for IEPA approval. Clayton Bloome requested that UNO-VEN provide alternative language to this effect in the comments.

The meeting ended around 12:30 p.m.

Rob, feel free to call me at (630) 257-4452 with any questions and comments upon your review of these minutes.

Sincerely,



Kevin J. Moss  
RCRA Coordinator

Attachment

cc: Clayton Bloome, IEPA Tom Hall, Unocal Claude Harmon, UNO-VEN  
Jerry Kuhn, IEPA Mark Robbins, Radian/AUS Martina Schlauch, Radian/CHI

**AGENDA**  
**Data Presentation for and Discussion of**  
**the Use of UNO-VEN's Land Treatment Facility for**  
**Future Treatment of Remediation Wastes**

**10:00 a.m., Friday, 12/6/96**

- I. Overview
- II. Presentation of Current Status
  - Vertical distribution of constituents with respect to Treatment Zone
  - Horizontal distribution of constituents
  - Cumulative concentrations of metals
    - Low concentrations of Oil and Grease and organics
    - Metals outside the LTF
  - Lysimeter data
  - Groundwater data
  - Questions and discussion
- III. Evaluation of LTF's ability to continue to treat wastes
  - Leaching concerns
  - Bio- and phytotoxicity concerns (chrome)
  - Restriction of waste constituents
  - Monitoring approach
- IV. Additional Data Needs?
- V. Modification of Permit Language to include CAMU
- VI. Interim Measures
- VII. Action Items and Wrap-Up

C-417-M-2

cc. Maywood  
USEPA

JCH  
WRW

# The UNO-VEN Company

76 Products

Nicholas J. Nedeau  
Counsel

3850 North Wilke Road  
Arlington Heights, IL 60004-1269

Tel: (708) 818-7419  
Fax: (708) 818-7155

December 16, 1993

VIA FAX: (217) 524-3291

Mr. James Moore, P.E.  
Manager, Corrective Action Unit  
Permit Section  
Division of Land Pollution Control  
Bureau of Land  
Illinois Environmental Protection Agency  
2200 Churchill Road  
P.O. Box 19276  
Springfield, Illinois 62794

Re: IEPA No: 1978030004 - Will County  
Facility Name: UNO-VEN Refinery  
U.S.EPA No: ILD041550567  
RCRA Closure File

Dear Mr. Moore:

On October 14, 1993 I wrote you regarding an extension of time for UNO-VEN's response to Illinois EPA's questionnaire. At that time we agreed that UNO-VEN's response would be due on December 16, 1993. As a result of my absence from the office for knee surgery I have been unable to review the final draft response. I expect to return to the office on December 20, 1993 and will fax you a copy of UNO-VEN's response on that date. If you have any questions regarding my request please feel free to contact me at home at (708) 295-6645.

Very truly yours,

*Nicholas J. Nedeau/msf*

Nicholas J. Nedeau  
Environmental Counsel

NJN/msf

cc: Darrell Jacob  
Bill Busse

nedeau\moore.ltr

DEC 20 1993



*George Hamper*

Unocal North American  
Oil & Gas Division  
Unocal Corporation  
14141 Southwest Freeway  
Sugar Land, Texas 77478  
P.O. Box 4551  
Houston, Texas 77210-4551  
Telephone (713) 491-7600

**UNOCAL** 76

*C. W. HICK*  
*CC: RA/RF*  
*copies to*  
*UIC*  
*HR-81 ← RCRA*  
*AIR*

*ROUTE -*  
*LANE*  
*ITV*  
*DOWN*

November 3, 1992

Regional Administration  
Region V  
Federal Building  
230 South Dearborn  
Chicago, Illinois 60604

**SUBJECT:**  
**SIGNATURES FOR CONSOLIDATED**  
**PERMIT REPORTS**

Gentlemen:

Attached is an authorization in which our General Manager of the Central U.S. Business Unit has delegated authority for signing certain Consolidated Permit Reports to duly authorized representatives.

Sincerely yours,

*Ben J. Walkowiak*

Ben J. Walkowiak  
HES Coordinator

BJW:nal

Attachment

RECEIVED

NOV 11 1992  
PERMIT SECTION  
EPA, REGION V

ENVIRONMENTAL  
PROTECTION AGENCY  
REGION V  
OFFICE OF THE  
REGIONAL ADMINISTRATOR  
92 NOV 27 P4:29



**AUTHORIZATION**

**THE STATE OF TEXAS   §  
                                  §  
COUNTY OF HARRIS   §**

**KNOW ALL MEN BY THESE PRESENTS**

**That I, L. Carl Hebert, General Manager, Central U.S. Business Unit, Union Oil Company of California, of Harris County, Texas, have authorized, and by these presents and in accordance with applicable Environmental Protection Agency regulations, do authorize the Asset Managers of the Central U.S. Business Unit of Union Oil Company of California, to sign on behalf of the Company, reports submitted by said company in connection with permits under the National Pollutant Discharge Elimination System, the Underground Injection Control Program, the Resource Conservation and Recovery Act and the Prevention of Significant Deterioration provisions of the Clean Air Act.**

**This authorization is revocable by revocation entered in the Regional Office of the Environmental Protection Agency.**

**IN WITNESS WHEREOF, I have hereunto set my hand this 3<sup>rd</sup> day of NOV,  
1992.**

**UNION OIL COMPANY OF CALIFORNIA**

**WITNESSES:**

*Ben J. Whelan*  
 *Gordon H. Ferguson*

*L. Carl Hebert*  
**L. CARL HEBERT  
GENERAL MANAGER**



Illinois Environmental Protection Agency

P. O. Box 19276, Springfield, IL 62794-9276

USEPA  
#LD 041 550 567

217/782-6761

Refer to: 1978030004 -- Will County  
Uno-Ven Chicago Refinery  
ILD041550567  
Compliance File

December 13, 1990

Uno-Ven Chicago Refinery  
Attention: Lee Erchull  
135th Street and New Avenue  
Lemont, Illinois 60439-3659

Dear Mr. Erchull:

On October 17, 1990 your facility was inspected by Mark Retzlaff of the Illinois Environmental Protection Agency. The purpose of this inspection was to determine your facility's compliance with 35 Illinois Administrative Code, Part 722, Subparts A through E and Part 725, Subpart(s) A through E, I and K. At the time of the inspection, no apparent violations of the requirements addressed as part of the inspection were observed.

For your information a copy of the inspection report is enclosed. Should you have any questions regarding the inspection, please contact Mark Retzlaff at 708/531-5900.

Sincerely,

*Bill Radlinski*  
E. William Radlinski, Manager  
Planning and Reporting Section  
Division of Land Pollution Control

EWR:MSR:LS:jk/4264n,22

Enclosure

cc: Division File  
Maywood Region  
Brian White  
Mark Retzlaff  
USEPA Region V

NOV 06 1990

5HR-13

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Union Oil Co. of California  
Chicago Refinery  
135th Street & New Avenue  
Lemont, Illinois 60439

Re: Union Oil Co. of California  
Chicago Refinery  
ILD 041 550 567

Dear Sir or Madam:

The purpose of this letter is to inform you of the November 7, 1990, date of the expiration of the national capacity variance for petroleum refinery wastes, K048-K052. As you are aware under the Third Third rule, EPA granted an additional three-month national capacity variance for these wastes (55 FR 22641, June 1, 1990). The variance expires on November 7, 1990.

As of November 8, 1990, you, as the generator of these wastes, must treat the K048-K052 wastes to BDAT standards prior to land disposal, unless one of these three situations exists:

1. You have received final approval for a case-by-case extension (RCRA Section 3004(h)(3) and 40 CFR 268.5) as published in the Federal Register, or
2. You have received final approval for a "no-migration" variance (40 CFR 268.6) as published in the Federal Register, or
3. You or the treatment facility has received a treatability variance (40 CFR 268.44) for the particular waste stream(s).

The Agency anticipates that it will not issue any final decisions on any petitions for variances or extensions prior to November 8, 1990. During the period of the national capacity variance, you should have been exploring and implementing alternatives to the land disposal of untreated K048-K052 wastes.

The Agency is committed to carrying out the mandate established by Congress in RCRA Section 3004 of the Hazardous and Solid Waste Amendments of 1984. We will be conducting inspections and taking subsequent enforcement actions appropriate to the nature of the violations relating to the Land Disposal

P 461 599 391

**RECEIPT FOR CERTIFIED MAIL**

NO INSURANCE COVERAGE PROVIDED

NOT FOR INTERNATIONAL MAIL

*(See Reverse)*

U.S.G.P.O. 1989-234-555

Sent to		Union Oil Co. of Cali.
Street and No.		135th Street & New Ave.
P.O., State and ZIP Code		Lemont, Illinois 60439
Postage	\$	25
Certified Fee		85
Special Delivery Fee		
Restricted Delivery Fee		
Return Receipt showing to whom and Date Delivered		90
Return Receipt showing to whom, Date, and Address of Delivery		
TOTAL Postage and Fees	\$	200
Postmark or Date		

PS Form 3800, June 1985

5HR-13

**STICK POSTAGE STAMPS TO ARTICLE TO COVER FIRST CLASS POSTAGE,  
CERTIFIED MAIL FEE, AND CHARGES FOR ANY SELECTED OPTIONAL SERVICES. (see front)**

1. If you want this receipt postmarked, stick the gummed stub to the right of the return address leaving the receipt attached and present the article at a post office service window or hand it to your rural carrier. (no extra charge)
2. If you do not want this receipt postmarked, stick the gummed stub to the right of the return address of the article, date, detach and retain the receipt, and mail the article.
3. If you want a return receipt, write the certified mail number and your name and address on a return receipt card, Form 3811, and attach it to the front of the article by means of the gummed ends, if space permits. Otherwise, affix to back of article. Endorse front of article **RETURN RECEIPT REQUESTED** adjacent to the number.
4. If you want delivery restricted to the addressee, or to an authorized agent of the addressee, endorse **RESTRICTED DELIVERY** on the front of the article.
5. Enter fees for the services requested in the appropriate spaces on the front of this receipt. If return receipt is requested, check the applicable blocks in item 1 of Form 3811.
6. Save this receipt and present it if you make inquiry.

● **SENDER:** Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.

Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. ☒ Show to whom delivered, date, and addressee's address. (Extra charge)  
2. ☐ Restricted Delivery (Extra charge)

3. Article Addressed to:

Union Oil Co. of California  
Chicago Refinery  
135th Street & New Avenue  
Lemont, Illinois 60439

4. Article Number

P 461 599 391

Type of Service:

- |   |  |
|---|--|
| <input type="checkbox"/> Registered           | <input type="checkbox"/> Insured                           |
| <input checked="" type="checkbox"/> Certified | <input type="checkbox"/> COD                               |
| <input type="checkbox"/> Express Mail         | <input type="checkbox"/> Return Receipt<br>for Merchandise |

Always obtain signature of addressee  
or agent and DATE DELIVERED.

5. Signature — Addressee

X

6. Signature — Agent

X

7. Date of Delivery

8. Addressee's Address (ONLY if  
requested and fee paid)



UNITED STATES POSTAL SERVICE

OFFICIAL BUSINESS

**SENDER INSTRUCTIONS**

Print your name, address and ZIP Code in the space below.

- Complete items 1, 2, 3, and 4 on the reverse.
- Attach to front of article if space permits, otherwise affix to back of article.
- Endorse article "Return Receipt Requested" adjacent to number.

5HR-13



PENALTY FOR PRIVATE  
USE, \$300

**RETURN  
TO**

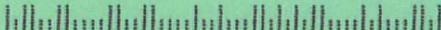


Print Sender's name, address, and ZIP Code in the space below.

U.S. EPA

230 South Dearborn Street

Chicago, Illinois 60604





Restrictions regulations soon after the November 8, 1990, date. We strongly advise you to take any necessary steps to be in compliance with these important requirements on the effective date.

Sincerely yours,

ORIGINAL SIGNED BY

KARL BREMER  
William E. Muno  
Acting Associate Director  
Office of RCRA

cc: E. William Radlinski  
Glenn Savage  
Illinois Environmental Protection Agency

SIGNATURE/INITIAL CONCURRENCE REQUESTED - RCRA ENFORCEMENT BRANCH (REB)									
TYP.	AUTH	IL/IN TES CHIEF	MI/VI TES CHIEF	MN/OH TES CHIEF	IL/MI/VI EPS CHIEF	IN/MN/OH EPS CHIEF	REB BRANCH CHIEF	RCRA ASSOC. DIR.	WMD DIVISION DIRECTOR
PH 11/5/90						SAS 11-5-90	211 11-6-90	V/S 11/6/90	



Illinois Environmental Protection Agency

P. O. Box 19276, Springfield, IL 62794-9276

USEPA

217/782-6761

Refer to: 1978030004 -- Will County  
Uno-Ven  
ILD041550567  
Compliance File

COMPLIANCE INQUIRY LETTER

Certified #P 331 394 833

August 30, 1990

Uno-Ven Company  
Attn: Catherine C. Barnard, Manager  
Environmental Service  
1650 E. Golf Road  
Schaumburg, Illinois 60196-1088

Dear Ms. Barnard:

The purpose of this letter is to address the status of the above-referenced facility in relation to the requirements of 35 Ill. Adm. Code Part 725 and to inquire as to your position with respect to the apparent violations identified in Attachment A and your plans to correct these apparent violations.

The Agency's findings of apparent non-compliance are based on a August 22, 1990 review of documents submitted to the Agency to demonstrate compliance with the requirements of Subpart H.

Please submit in writing, within fifteen (15) calendar days of the date of this letter, the reasons for the identified violations, a description of the steps which have been taken to correct the violations and a schedule, including dates, by which each violation will be resolved. The written response, and two copies of all documents submitted in reply to this letter, should be sent to the following:

Brian White  
Compliance Unit  
Planning and Reporting Section  
Illinois Environmental Protection Agency  
Division of Land Pollution Control  
2200 Churchill Road  
Post Office Box 19276  
Springfield, Illinois 62794-9276

Further, take notice that non-compliance with the requirements of the Illinois Environmental Protection Act and rules and regulations adopted thereunder may be the subject of enforcement action pursuant to either the Illinois Environmental Protection Act, Ill. Rev. Stat., Ch. 111 1/2, Sec. 1001 et seq. or the federal Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Sec. 6901 et seq.

RECEIVED  
AUG 31 1990  
OFFICE OF RCRA  
Waste Management Division  
U.S. EPA, REGION V



Page 2

If you have any questions regarding the above, please contact Andy Vollmer at 217/782-5761. Enclosed are the financial forms to be corrected.

Sincerely,

*Bill Radlinski*

E. William Radlinski, Manager  
Planning and Reporting Section  
Division of Land Pollution Control

ENR:BW:sf/3129n,24-25

Enclosure

cc: Division File  
Maywood Region  
USEPA ✓  
Brian White  
Andy Vollmer  
Scott Phillips, Enforcement





## ATTACHMENT A

1. Pursuant to 35 Ill. Adm. Code 725.244(b), during the active life of the facility, the owner or operator shall adjust the post-closure cost estimate for inflation within 30 days after each anniversary of the date on which the first post-closure cost estimate was prepared. The adjustment must be made 60 days prior to the anniversary date of the establishment of the financial instruments used to comply with Section 725.245. For owners and operators using the financial test or corporate guarantee, the closure cost estimate must be updated for inflation within 30 days after the close of the firm's fiscal year and before submission of updated information to the Agency as specified in Section 725.245(e)(5). The adjustment may be made by recalculating the post-closure cost estimate in current dollars, or by using an inflation factor derived from the annual Implicit Price Deflator for Gross National Product as published by the U.S. Department of Commerce in its Survey of Current Business as specified in subsections (b)(1) and (b)(2). The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year.

1. The first adjustment is made by multiplying the post-closure estimate by the inflation factor. The result is the adjusted post-closure cost estimate.
2. Subsequent adjustments are made by multiplying the latest adjusted post-closure cost estimate by the latest inflation factor.

You are in apparent violation of 35 Ill. Adm. Code 725.244(b) for the following reason(s): Your post closure cost decreased and with a 4% inflation factor your post closure cost should have increased. Please explain or adjust your post closure accordingly.

2. Pursuant to 35 Ill. Adm. Code 724.251, the Agency shall promulgate standardized forms based on 40 CFR 264.151 with such changes in wording as are necessary under Illinois law. Any owner or operator required to establish financial assurance under this Subpart shall do so only upon the standardized forms promulgated by the Agency. The Agency shall reject any financial assurance document which is not submitted on such standardized forms. The Agency has rejected your financial assurance document(s) for failure to use the Illinois standardized forms.

1. Your letter from the Chief Financial Officer is incorrect. You listed the Mountain Pass facility as covered by the Illinois Guarantee; however, this should be listed in the first paragraph and not under the guarantee.
2. The Trust Agreement fails to have the Corporate Seal affixed as required.

US EPA



Illinois Environmental Protection Agency

P. O. Box 19276, Springfield, IL 62794-9276

217/782-6761

Refer to: 1978030004 -- Will County  
Lemont/Uno-Ven (UNOCAL)  
ILD041550567  
Compliance File

May 9, 1990

Uno-Ven  
Attn: D.W. Denton, Superintendent  
Health, Environment & Safety  
135th Street and New Avenue  
Lemont, Illinois 60439

Dear Mr. Denton:

The Agency is in receipt of your April 30, 1990 response(s) to our April 10, 1990 Pre-Enforcement Conference. Your response(s) has been reviewed and the apparent violation(s) of Section(s) 725.193(d)(1) is now considered resolved.

If you have any questions, please contact Cindy Davis at 217/782-6761.

Sincerely,

*Angela Aye Tin*  
Angela Aye Tin, Manager  
Technical Compliance Unit  
Compliance Section  
Division of Land Pollution Control

AAT:BW:bjh/1678n/15

cc: Division File  
Maywood Region  
Cindy Davis  
USEPA, Region V ✓  
Brian White

USEPA



MEMORANDUM

DATE: April 16, 1990  
TO: Division File  
FROM: Cindy Davis *Diat*  
SUBJECT: 1978030004 -- Will  
Uno-Ven  
Compliance

A Pre-Enforcement Conference was held April 10, 1990 between the Agency and Uno-Ven. For those in attendance see the attached list. The violation of 725.193(d)(1) cited in the Agency's March 7, 1990 Pre-Enforcement Conference Letter was discussed. Uno-Ven was using Tables 15 and 16 of the TEGD in their statistical method. Georgie Smith explained the Agency does not approve the use of these tables because under interim status multiple well comparisons are not allowed and Tables 15 and 16 of the TEGD do not reasonably balance out the false positive and false negative error rates. Uno-Ven explained that they have had a false positive error problem in the past, and because Tables 15 and 16 used multiple well comparisons, the chance for a false positive error was reduced. Uno-Ven further explained the major problem in the past has been that the background data did not have a lot of variance. This problem should disappear, however, because a new background has been established. Pursuant to the USEPA Consent Agreement, Unocal (Uno-Ven) had to install a new groundwater monitoring system and establish new background values. In the interim while establishing new background values, statistical comparisons were to be done using the old background values. It was using these values that caused the statistically significant increases resulting in the enforcement actions. Georgie explained the problem in the past with triggering was not due to a false positive error, therefore, the problem was not a statistical one, and Uno-Ven should not need to use Tables 15 and 16. The Agency and Uno-Ven agreed to put this argument off since it may not be necessary if the new background values indicate the false positive error rate will not be a problem. Uno-Ven agreed to submit a response to the Agency by April 30, 1990 proposing a statistical procedure for detection monitoring. This procedure will not include use of Tables 15 and 16 of the TEGD.

Georgie Smith informed Uno-Ven any statistical procedure proposed under 264(724) must meet the following criteria:

1. The test has to be a T-test;
2. Must include individual comparisons for each indicator parameters; and
3. Must include individual comparisons for each well.



Page 2

The Agency also discussed problems discovered when reviewing the annual report.

1. Uno-Ven did not separately identify in the annual report the statistically significant increases detected for upgradient well G01D as required by 725.194(a)(2) in accordance with 725.193(c)(1). G01D triggered for pH for the 1st, 2nd and 3rd quarters.
2. Page 2 of the third quarter analytical results for G06D was not submitted with the annual report.

Uno-Ven agreed to submit both of these with the April 30, 1990 response.

Harry Chappel discussed the problems with manifesting nonhazardous waste from the refinery to the landfarm and the decant basin. The landfarm and decant basin will need a site number so the computer can track the waste shipment. Waste has to be manifested because transportation requires use of 2 public roads. Harry explained that the RCRA Closure Plans for the landfarm and surface impoundment (closure from a hazardous surface impoundment to a nonhazardous decant basin) should address the problem of an actual permit. The only thing needed is a waste stream application completed by Uno-Ven giving the name and address of the facility. Harry informed Uno-Ven he would call them and let them know if anything else would be needed.

Andy Vollmer discussed the financial assurance. Uno-Ven was required to submit a new Part A application and financial assurance to show change of ownership. The financial papers submitted listed Uno-Ven as the corporation putting up the money. Andy told them since Uno-Ven has not been in business for a year, (an auditor's opinion cannot be provided), Union Oil would have to provide financial assurance for closure. Post closure financial assurance can be provided by Uno-Ven. Representatives from Uno-Ven stated they do not prepare the financial instruments, but they would talk to the people in California who do and try to get it straightened out.

The meeting adjourned at 3:00 p.m.

CD/mls/1195n/86-87

## ATTENDANCE RECORD

Date April 10, 1990

Subject 1978030004-Will Unocal

[illegible]



**UNO-VEN**  
Products

The UNO-VEN Company  
135th Street & New Avenue  
Lemont, Illinois 60439

Xc FRS Haywood  
Xc USEPA  
Xc CSD  
then

HES 142-90

Jan C -

Thomas B. Williams

Manager, Chicago Refinery  
Telephone (708) 257-7761

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED  
P 296 346 621

1978030004  
UNO-VEN  
ILD041550567

February 23, 1990

Ms. Angela Aye Tin, Manager  
Technical Compliance Unit  
Compliance Section  
Illinois Environmental  
Protection Agency  
2200 Churchill Road  
P. O. Box 19276  
Springfield, IL 62794-9276

Compliance Inquiry Letter

RECEIVED

FEB 26 1990

IEPA-DLPC

Dear Ms. Tin:

On February 8, 1990, UNO-VEN received your Compliance Inquiry Letter dated February 2, 1990. That letter alleges that UNO-VEN violated 35 Ill. Admin. Code 725.193(d)(1) by failing to notify the Director that the facility may be affecting groundwater quality. We have reviewed Attachment A to your letter, which attempts to explain the alleged violation, and believe that there is no violation of the referenced regulation.

Based upon Attachment A, it appears that the confusion which led to your issuing the Compliance Inquiry Letter relates to the statistical procedures (and t-tables) used to conduct a statistical comparison of the analytical data. Therefore, we will focus our discussion on that issue. Our comments regarding this issue are as follows:

1. Both the guidance document and regulations cited in Attachment A relate to the statistical procedures to be employed for analyzing groundwater data generated at permitted hazardous waste land disposal facilities. UNO-VEN, being an interim status facility, not a permitted facility, is not subject to the U.S. EPA regulations in 40 CFR Part 264.90 et seq. Instead, the interim status regulations in Illinois' equivalent to 40 CFR Part 265 (35 Ill. Admin. Code 725) must be applied. Particularly, 40 CFR Part 265.93(b) (35 Ill. Admin. Code 725.193 (b)) cites the appropriate statistical analysis to be used (Appendix IV, "Tests for Significance", elaborates on the t-test requirements).

This regulation requires that the student's t-test be used to statistically compare the data. Unlike the regulations found in 40 CFR Part 264, the interim status regulations do not contain a statistical performance standard or allow alternative statistical tests to be used. Also, they do not specify which student's t-test or t-tables must be used.

2. The U.S. EPA's Technical Enforcement Guidance Document (TEGD) (September 1986) and the t-tables contained therein fully meet the requirements of the regulations in 40 CFR Part 265 et seq. (35 Ill. Admin. Code Part 725). The average replicate test procedure described in that document is a multiple comparison technique that provides for individual well comparisons using modified t-table values. The t-table values incorporate a factor analogous to the least-significant difference factor used in one-way ANOVA. The need for this factor is discussed below.
3. The decision of whether or not to escalate from detection monitoring to assessment monitoring is made based on one measurement event at a given time point. If one of n parameters from one of m wells fails, then assessment is technically triggered. If the multiplicity of parameters is not taken into account, then there is a significant increase in the rate of rejection of the null hypothesis (false positives) that arises solely because of statistical anomalies unrelated to the data quality.

This problem is best illustrated with an example. Consider the case of a decision to accept or reject an analytical data set comprised of twenty parameters (five wells with four indicator parameters). Allow a level of significance of 0.01, and the probability that all the parameters will be within specification at the same time is 81%, not 99% as the regulations would imply. It is this type of statistical aberration for which Tables 15 and 16 correct.

4. While IEPA did provide UNO-VEN with guidance indicating that it preferred facilities not use Tables 15 and 16 in the TEGD, there is no regulation which disallows the use of Tables 15 and 16 during interim status. In fact, U.S. EPA, by issuing the TEGD, encouraged facilities to use those tables as a way to avoid false positives. In view of conflicting guidance from two regulatory agencies and the history of false positives at the facility, UNO-VEN evaluated both and determined that the statistical methodology in the TEGD (including Tables 15 and 16) was most appropriate for their facility. As both were guidance and not law, UNO-VEN was operating within rights under RCRA.

February 23, 1990

In summary, we believe that there has been no violation of the applicable interim status regulations. When UNO-VEN statistically analyzed its data using a t-test, which is recommended by U.S. EPA and meets the requirements of 35 IAC 725.192, no statistically significant increase was detected during the first quarter of 1989. Therefore, no additional statistical analysis was required until the third quarter and no violation exists.

In an effort to resolve this issue, UNO-VEN requests that a meeting be held between technical representatives of IEPA, UNO-VEN and UNO-VEN's consultant. The purpose of this meeting will be to attempt to resolve this issue at a technical level rather than having it escalate into a legal dispute. Please contact L. D. Erchull at (708) 257-7761 in order to arrange a mutually agreeable time and date.

Very truly yours,



D. W. Denton  
Superintendent  
Health, Environment & Safety

LDE/lis



Illinois Environmental Protection Agency

P. O. Box 19276, Springfield, IL 62794-9276

217/782-6761

Refer to: 1978030004 -- Will County  
Unocal  
ILD041550567  
Compliance File

COMPLIANCE INQUIRY LETTER

Certified # P 115 239 821

February 2, 1990

Uno-Ven  
Attn: D. W. Denton, Superintendent  
Health, Environment & Safety  
135th Street and New Avenue  
Lemont, Illinois 60439

Dear Mr. Denton:

The purpose of this letter is to address the status of the above-referenced facility in relation to the requirements of 35 Ill. Adm. Code, Part 725, Subpart F and to inquire as to your position with respect to the apparent violations identified in Attachment A and your plans to correct these apparent violations. The Agency's findings of apparent non-compliance as listed in Attachment A are based on a January 22, 1990 review of documents submitted to the Agency to demonstrate compliance with the requirements of Part 725, Subpart F.

Please submit in writing, within fifteen (15) calendar days of the date of this letter, the reasons for the identified violations, a description of the steps which have been taken to correct the violations and a schedule, including dates, by which each violation will be resolved. The written response, and two copies of all documents submitted in reply to this letter, should be sent to the following:

Angela Aye Tin, Manager  
Technical Compliance Unit  
Compliance Section  
Illinois Environmental Protection Agency  
Division of Land Pollution Control  
2200 Churchill Road  
Post Office Box 19276  
Springfield, Illinois 62794-9276



Page 2

Further, take notice that non-compliance with the requirements of the Illinois Environmental Protection Act and rules and regulations adopted thereunder may be the subject of enforcement action pursuant to either the Illinois Environmental Protection Act, Ill. Rev. Stat., Ch. 111 1/2, Sec. 1001 et seq. or the federal Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Sec. 6901 et seq.

If you have any questions regarding the above, please contact Cindy Davis at 217/782-6761.

Sincerely,

*Angela Aye Tin*

Angela Aye Tin, Manager  
Technical Compliance Unit  
Compliance Section  
Division of Land Pollution Control

AAT:CB:RJa:0413m/35-36

cc: Division File  
Northern Region  
Cindy Davis  
USEPA Region V ✓





## ATTACHMENT A

1. Pursuant to 35 Ill. Adm. Code 725.193(d)(1), if the analyses performed under paragraph (c)(2) confirm the significant increase (or pH decrease) the owner or operator must provide written notice to the Director -- within seven days of the date of such confirmation -- that the facility may be affecting groundwater quality.

You are in apparent violation of 35 Ill. Adm. Code 725.193(d)(1) for the following reason(s): Failure to notify the Director of significant increases in monitor wells G05D for pH for the second quarter, and G06D for pH in the first and second quarters of 1989.

Uno-Ven was notified in writing on November 9, 1989, the Agency does not allow the use of Tables 15 and 16 of USEPA's September 16, 1986, RCRA Groundwater Monitoring Technical Enforcement Guidance Document (TEGD) for statistical comparisons. The tables are not acceptable since use of them does not meet general performance standards for methods that take into account experiment wide error rates as described in USEPA's Interim Final Guidance, Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, dated February, 1989 and Final Rule, Statistical Methods for Evaluating Groundwater Monitoring from Hazardous Waste Facilities, Federal Register, Tuesday, October 11, 1988. Uno-Ven was also verbally informed of the technical inadequacies with using these tables.

The Agency has evaluated the data using a standard t-table. For a one tailed test at the 99 percent confidence interval with an n of 11 (12-1), the correct tc is 2.718. For a two tailed test at the 99 percent confidence interval, the correct tc value is 3.106. Using these tc values in Uno-Ven's calculations:

Upper Bound of the 99 Percent Confidence Interval for SC, TOX and TOC:

$$X_C = X_D + T_C S_D (1 + 1/n_D \times 0.5)^{1/2}$$

Specific Conductance

$$X_C = 1248.06 + (2.718) (472.75) (1 + 1/12)^{1/2}$$

$$X_C = 2585.46$$

TOC

$$X_C = 10.63 + (2.718) (8.73) (1 + 1/12)^{1/2}$$

$$X_C = 35.33$$

TOX

$$X_C = .0790 + (2.718) (0.0775) (1 + 1/12)^{1/2}$$

$$X_C = 0.2982$$

725.193(d)(1)  
TEGD starts.  
(Sign-incre. in  
G05D - pH  
G06D - pH)



Page 2

Lower and Upper Bound of the 99 Percent Confidence Interval for pH:

$$X_c = X_b + T_c S_b (1 + 1/(n_b \times o_b))^{1/2}$$

pH

$$X_c = 7.11 + (3.106) (.15) (1 + 1/12)^{1/2}$$

$$X_c = 6.625 - 7.59$$

When comparing the first, second and third quarters 1989 data to the calculated  $X_c$  values, the following statistically significant increases were observed:

G050

2nd quarter pH 7.68  
3rd quarter pH 7.79  
Resample pH 7.55

G060

1st quarter pH 7.69  
2nd quarter pH 8.00  
3rd quarter pH 8.14  
Resample pH 8.16

\*G010

1st quarter pH 8.06  
2nd quarter pH 7.90  
3rd quarter pH 7.89

Monitoring well indicator parameters are statistically significant if the mean values for a sampling event are:

pH: Values less than 6.625 or greater than 7.59  
SC: Values greater than 2585.46  
TOC: Values greater than 35.33  
TOX: Values greater than 0.2982

\*Upgradient well does not require notification until Annual Report.

Of the above significant increases only G060 for the third quarter (pH) was reported to the Agency.

CD/mis/0321n/1-2

Jon C



Illinois Environmental Protection Agency • P. O. Box 19276, Springfield, IL 62794-9276

217/782-6761

Refer to: 1978030004 -- Will County  
Lemont/Uno-Ven (Unocal)  
ILD041550567  
Compliance File

**PRE-ENFORCEMENT CONFERENCE LETTER**

Certified # P 106 008 439

March 7, 1990

Uno-Ven  
Attn: D.W. Denton, Superintendent  
Health, Environment & Safety  
135th Street and New Avenue  
Lemont, Illinois 60439

Dear Mr. Denton:

The Agency has previously informed Uno-Ven of apparent violations of the Illinois Environmental Protection Act and/or rules and regulations adopted thereunder. These apparent violations are set forth in Attachment A of this letter.

As a result of these apparent violations, it is our intent to refer this matter to the Agency's legal staff for the preparation of a formal enforcement case. The Agency's legal staff will, in turn, refer this matter to the Office of Attorney General or to the United States Environmental Protection Agency for the filing of a formal complaint.

Prior to taking such action, however, you are requested to attend a Pre-Enforcement Conference to be held at the Illinois Environmental Protection Agency, Division of Land Pollution Control, 2200 Churchill Road, Springfield, Illinois. The purpose of this Conference will be:

1. To discuss the validity of the apparent violations noted by Agency staff, and
2. To arrive at a program to eliminate existing and/or future violations.

You should, therefore, bring such personnel and records to the conference as will enable a complete discussion of the above items. We have scheduled the Conference for March 27, 1990, at 1:30 p.m. If this arrangement is inconvenient, please contact Cindy S. Davis at 217/782-6761 to arrange for an alternative date and time.

In addition, please be advised that this letter constitutes the notice required by Section 31(d) of the Illinois Environmental Protection Act prior to the filing of a formal complaint. The cited Section of the Illinois

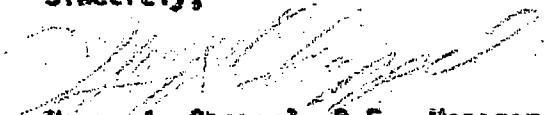




Page 2

Environmental Protection Act requires the Agency to inform you of the charges which are to be alleged and offer you the opportunity to meet with appropriate officials within thirty days of this notice date in an effort to resolve such conflict which could lead to the filing of formal action.

Sincerely,

  
Harry A. Chappel, P.E., Manager  
Compliance Section  
Division of Land Pollution Control

*201*  
HAC:BW/els/0774n/36-37

Attachment

cc: Division File  
Maywood Region  
Cindy Davis  
USEPA Region V ✓  
Brian White



## ATTACHMENT A

1. Pursuant to 35 Ill. Adm. Code 725.193(d)(1), if the analyses performed under paragraph (c)(2) confirm the significant increase (or pH decrease) the owner or operator must provide written notice to the Director -- within seven days of the date of such confirmation -- that the facility may be affecting groundwater quality.

You are in apparent violation of 35 Ill. Adm. Code 725.193(d)(1) for the following reason(s): Failure to notify the Director of significant increases in monitor wells G05D for pH for the second quarter, and G06D for pH in the first and second quarters of 1989.

Uno-Ven was notified in writing on November 9, 1989, the Agency does not allow the use of Tables 15 and 16 of USEPA's September 16, 1986, RCRA Groundwater Monitoring Technical Enforcement Guidance Document (TEGD) for statistical comparisons. The tables are not acceptable since use of them does not meet general performance standards for methods that take into account experiment wide error rates as described in USEPA's Interim Final Guidance, Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, dated February, 1989 and Final Rule, Statistical Methods for Evaluating Groundwater Monitoring from Hazardous Waste Facilities, Federal Register, Tuesday, October 11, 1988. Uno-Ven was also verbally informed of the technical inadequacies with using these tables.

The Agency has evaluated the data using a standard t-table. For a one tailed test at the 99 percent confidence interval with an n of 11 (12-1), the correct tc is 2.718. For a two tailed test at the 99 percent confidence interval, the correct tc value is 3.106. Using these tc values in Uno-Ven's calculations:

Upper Bound of the 99 Percent Confidence Interval for SC, TOX and TOC:

$$X_c = X_b + T_c S_b (1 + 1/nb \times db)^{1/2}$$

Specific Conductance

$$X_c = 1248.06 + (2.718) (472.75) (1 + 1/12)^{1/2}$$

$$X_c = 2585.46$$

TOC

$$X_c = 10.63 + (2.718) (8.73) (1 + 1/12)^{1/2}$$

$$X_c = 35.33$$

TOX

$$X_c = .0790 + (2.718) (0.0775) (1 + 1/12)^{1/2}$$

$$X_c = 0.2982$$



Page 2

Lower and Upper Bound of the 99 Percent Confidence Interval for pH:

$$X_c = \bar{X}_b + T_c S_b (1 + 1/(n_b \times o_b))^{1/2}$$

pH

$$X_c = 7.11 + (3.106) (.15) (1 + 1/12)^{1/2}$$

$$X_c = 6.625 - 7.59$$

When comparing the first, second and third quarters 1989 data to the calculated  $X_c$  values, the following statistically significant increases were observed:

G05D

2nd quarter pH 7.68  
3rd quarter pH 7.79  
Resample pH 7.55

G06D

1st quarter pH 7.69  
2nd quarter pH 8.00  
3rd quarter pH 8.14  
Resample pH 8.16

\*G01D

1st quarter pH 8.06  
2nd quarter pH 7.90  
3rd quarter pH 7.89

Monitoring well indicator parameters are statistically significant if the mean values for a sampling event are:

pH: Values less than 6.625 or greater than 7.59  
SC: Values greater than 2585.46  
TOC: Values greater than 35.33  
TOX: Values greater than 0.2982

\*Upgradient well does not require notification until Annual Report.

Of the above significant increases only G06D for the third quarter (pH) was reported to the Agency.

CD/mls/0774n/38-39

Unocal Refining & Marketing Division  
Unocal Corporation  
135th Street & New Avenue  
Lemont, Illinois 60439  
Telephone (312) 257-7761

HES 491-89

*xc cover letter only*

*to*

*-USEPA*

*-FOS Maywood*

*-Cindy Davis*

*-then Mary Eruse*

**UNOCAL** 

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED  
P 994 489 341

Thomas B. Williams  
Manager, Chicago Refinery

Ms. Angela Aye Tin  
Illinois Environmental Protection  
Agency  
Division of Land Pollution Control  
Technical Compliance Unit

Compliance Section  
P. O. Box 19276  
Springfield, IL 62794-9276

1978030004  
UNOCAL  
ILD041550567

Response to September 22, 1989  
Compliance Inquiry Letter

Dear Ms. Tin:

In response to your September 22, 1989 Compliance Inquiry Letter regarding missing monitoring data, we provide the following comments.

All of the required information was submitted to you in our June 26, 1989 submission. In case the letter has been misplaced, we are providing you with another copy.

Turbidity data on the wells was not reported because it is not required as referenced in Illinois Administrative Code Title 35, Section 725.192(b)1 and 40 CFR 265, appendix 3.

Should you have any further questions, please contact L. D. Erchull at the above telephone number.

RECEIVED

Very truly yours,

OCT 6 1989

IEPA-DLPC

C R Plug/LDE

C. R. Plug  
Superintendent  
Health, Environment & Safety

LDE/las

Attachment



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**REGION 5**

**230 SOUTH DEARBORN ST.**

**CHICAGO, ILLINOIS 60604**

REPLY TO THE ATTENTION OF:

5H-12

SEP 22 1969

CERTIFIED MAIL

RETURN RECEIPT REQUESTED

C.T. Corporation System  
Registered Agent for  
Ohio Waste Systems, Inc.  
815 Superior Avenue N.E.  
Cleveland, Ohio 44114

Re: Complaint, Findings of Violation  
and Compliance Order  
Evergreen Landfill  
EPA I.D. No.: CHD 608 111 327

Dear Sir or Madam:

Enclosed please find a Complaint and Compliance Order which specifies this Agency's determination of certain violations by Ohio Waste Systems, Inc., of the Resource Conservation and Recovery Act (RCRA) as amended, 42 U.S.C. §6901 et seq. This Agency's determination is based on inspections of the facility located at 2625 East Broadway, Northwood, Ohio 43619 by the Ohio Environmental Protection Agency (OEPA), and other information in the OEPA's and the United States Environmental Protection Agency's files. The Findings in the Complaint state the reasons for such a determination. In essence, the facility failed to meet particular requirements of RCRA relating to groundwater monitoring.

Accompanying the Complaint is a Notice of Opportunity for Hearing. Should you desire to contest the Complaint, a written request for a hearing is required to be filed with the Regional Hearing Clerk (5MF-14), United States Environmental Protection Agency, 230 South Dearborn Street, Chicago, Illinois 60604, within 30 days from receipt of this Complaint. A copy of your request should also be sent to Larry L. Johnson, Office of Regional Counsel (5CS-TUB-3) at the above address.

Regardless of whether you choose to request a hearing within the prescribed time limit following service of this Complaint, you are extended an opportunity to request an informal settlement conference.

If you have any questions or desire to request an informal conference for the purpose of settlement with Waste Management Division staff, please contact James Saric, United States Environmental Protection Agency, RCRA Enforcement Branch (5HR-12), 230 South Dearborn Street, Chicago, Illinois 60604. His phone number is (312) 886-4446.

Sincerely,

Basil G. Constantelos, Director  
Waste Management Division

Enclosure

cc: Mr. John A. Barbush  
General Manager  
Evergreen Landfill  
2625 East Broadway  
Northwood, Ohio 43619

Richard Dreschel, OEPA-NWDO ✓

bcc: Robert Small, OWPE (OS-520) ✓

Larry Johnson, ORC 5CS-TUB-3 ✓

Regional Hearing Clerk, 5MF-14 ✓

OH Permit Section, 5HR-13 ✓

Jean Sharp, 5HR-13 ✓

5HR-12:JSARIC:sbowie:6/8/89:disk #2 OHIOWASTE.CMP:6-4446  
rev: or-6/13/89.rev8/16/89rev 8/31/89

INIT. DATE	TYP.	AUTH.	IL/IN TECH. ENF. SEC.	MI/VI TECH. ENF. SEC.	OH/MN TECH. ENF. SEC.	IL/MI/VI ENF. PROG. SECTION	IN/MN/OH ENF. PROG. SECTION	RCRA ENF. BR. CHIEF	O.R. A.D.D.	WMD DIR
SHB 8/31		8/31			KB KP 8/31			AMB to WEM 9/1/89	TBB 9/1/89	RS 9/1/89

EP  
9-2289

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION V

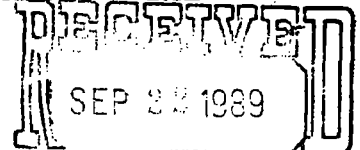
IN THE MATTER OF:

OHIO WASTE SYSTEMS, INC.  
2625 EAST BROADWAY  
NORTHWOOD, OHIO 43619

EPA I.D. No: OHD 608 111 327

V-W-- 80 R- 46  
DOCKET NO.

COMPLAINT, FINDINGS OF  
VIOLATION AND COMPLIANCE  
ORDER



This Complaint is filed pursuant to Section 3008(a)(1) of the Resource Conservation and Recovery Act of 1976, as amended (RCRA), 42 U.S.C. §6928(a)(1), and the United States Environmental Protection Agency's Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties and the Revocation or Suspension of Permits, 40 CFR Part 22. The Complainant is the Director, Waste Management Division, Region V, United States Environmental Protection Agency (U.S. EPA). The Respondent is Ohio Waste Systems, Inc., located at 2625 East Broadway, Northwood, Ohio 43619.

This Complaint is based on information obtained by the U.S. EPA, including a compliance inspection conducted by the Ohio Environmental Protection Agency (OEPA) on August 25, 1988, and comprehensive groundwater monitoring evaluations conducted by the OEPA on August 26-27, 1986, and January 23, 1989. At the time of the inspections, violations of applicable State and Federal regulations were identified.

Pursuant to 42 U.S.C. §6928(a)(1), and based on the information cited above, it has been determined that Ohio Waste Systems, Inc., has violated Subtitle C of RCRA, Sections 3004 and 3005, 42 U.S.C. §6924 and 6925 and regulations cited



at 40 CFR 265.90(a), 40 CFR 265.94(a)(2)(ii), 40 CFR 265.310, and 40 CFR 265.117. The applicable Ohio Regulations are found in the Ohio Administrative Code (OAC) at 3745-65-90(a), 3745-65-94(A)(2)(B), 3745-66-10, and 3745-66-17.

#### JURISDICTION

Jurisdiction for this action is conferred upon U.S. EPA by Sections 2002(a)(1), 3006(b), and 3008 of RCRA, 42 U.S.C. §6912(a)(1), §6926(b), and §6928 respectively.

From July 15, 1983, until January 31, 1986, the State of Ohio had Phase I interim authorization pursuant to Section 3006 of RCRA, 42 U.S.C. §6926, to administer a hazardous waste program in lieu of the Federal program. This authorization allowed either the State or U.S. EPA to enforce Ohio hazardous waste statutes and regulation, where applicable, in lieu of Federal statutes. U.S. EPA retained authority in matters related to the issuance of final RCRA Permits during this period. On January 31, 1986, the State of Ohio's Phase I interim authorization expired. From February 1986 until June 30, 1989, the Federal Hazardous Waste program and regulations applied in the State of Ohio. On June 30, 1989, the State of Ohio was granted Final Authorization by the Administrator of U.S. EPA pursuant to Section 3006(b) of RCRA, 42 U.S.C. §6926(b), to administer a hazardous waste program in lieu of the Federal program. See 54 Federal Register 27,170 (1989). As a result, facilities in Ohio qualifying for interim status under Section 3005(e) of RCRA, 42 U.S.C. §6925(e), are now regulated under the Ohio provisions found at Ohio Administrative Code (OAC) Rule 3745-50 et seq., rather than the Federal regulations set forth at 40 CFR Part 265. Thus, this Complaint, Findings of Violation, and Compliance Order seeks to enforce both Federal and State



regulations, as applicable. Section 3008(a) of RCRA, 42 U.S.C. §6928(a), provides that U.S. EPA may enforce State regulations in those States authorized to administer a hazardous waste program. Notice to the State pursuant to this section has been provided.

#### FINDINGS OF VIOLATION

This determination of violation is based on the following:

1. Respondent, Ohio Waste Systems, Inc., is a person defined by Section 1004(15) of RCRA, 42 U.S.C. §6903(15), who owns and operates a facility at 2625 East Broadway, Northwood, Ohio that disposed of hazardous waste.
2. Section 3010(a) of RCRA, 42 U.S.C. §6930(a), requires any person who generates or transports hazardous waste, or owns or operates a facility for the treatment, storage, or disposal of hazardous waste, to notify U.S. EPA of such activity within 90 days of the promulgation of regulations identifying such hazardous waste under Section 3001 of RCRA. Section 3010 of RCRA also provides that no hazardous waste subject to regulations may be transported, treated, stored, or disposed of unless the required notification has been given.
3. U.S. EPA first published regulations concerning the identification, generation, transportation, treatment, storage, or disposal of hazardous waste on May 19, 1980. These regulations are codified at 40 CFR Parts 260 et seq. Notification to U.S. EPA of hazardous waste activity, including the activities of the Respondent, was required in most instances no later than August 18, 1980.
4. Section 3005(a) of RCRA requires U.S. EPA to publish regulations requiring each person owning or operating a hazardous waste treatment, storage, or

disposal facility to obtain a RCRA Permit. Such regulations were published on May 19, 1980, and are codified at 40 CFR Parts 270 and 271 (formerly Parts 122 and 123), as amended. The regulations require that persons who treat, store, or dispose of hazardous waste submit Part A of the permit application in most instances no later than November 19, 1980.

5. Section 3005(e) of RCRA provides that an owner or operator of a facility shall be treated as having been issued a permit pending final administrative disposition on the permit application provided that: (1) the facility was in existence on November 19, 1980; (2) the requirements of Section 3010(a) of RCRA concerning notification of hazardous waste activity have been complied with; and (3) an application for a permit has been made. This statutory authority to operate is known as interim status. U.S. EPA regulations implementing these provisions are found at 40 CFR Part 270.

6. The Respondent, Ohio Waste Systems, Inc., owns and operates a facility at 2625 East Broadway, Northwood, Ohio. The Respondent is an Ohio corporation whose registered agent is C.T. Corporation System, 815 Superior Avenue, N.E., Cleveland, Ohio 44114.

7. On August 18, 1980, Respondent filed a notification of hazardous waste activity for this facility with U.S. EPA pursuant to Section 3010 of RCRA. On November 19, 1980, Respondent filed Part A of the permit application with the U.S. EPA pursuant to Section 3005 of RCRA. Respondent obtained interim status for the processes and hazardous wastes listed in Part A of its permit application.

8. The Respondent disposed of hazardous waste at the facility. These wastes have been identified and listed as hazardous wastes under Section 3001 of the Act (U.S. EPA Hazardous Wastes Nos. D001, D002, D004, D005, D006, D007, D008, D009, D010, D011, D016, F006, F017, F018, K048, K049, K050, K051, K061, K062, K068, K071, K086, K106, P030, U220, and U226).

9. On August 26-27, 1986, OEPA conducted a RCRA comprehensive groundwater monitoring evaluation of Respondents facility and identified the following violation:

Failure to install a groundwater monitoring system capable of determining the facility's impact on the quality of groundwater in the uppermost aquifer, as required by 40 CFR 265.90(a) and OAC 3745-65-90(A). Specifically, in not installing groundwater monitor wells in the Lacustrine Zone and the Sandy Zone located approximately 50 - 60 feet below the facility, Ohio Waste Systems, Inc., is not adequately monitoring the uppermost aquifer.

10. In a letter dated April 10, 1987, OEPA notified Respondent of the violations noted in the August 26-27, 1986, inspection of Respondent's facility.

11. In a letter dated July 31, 1987, U.S. EPA notified Respondent of the inadequacies of the existing groundwater monitoring system.

12. On September 25, 1987, U.S. EPA conditionally approved Respondent's closure plan, provided that a revised post-closure groundwater monitoring plan be submitted by October 31, 1987, incorporating the required conditions.

13. In a letter dated August 29, 1989, U.S. EPA notified the Respondent that the post-closure plan was disapproved.

14. On February 24, 1988, Respondent submitted the 1987 Groundwater Monitoring Supplementary Annual Report. This Report failed to include the results of statistical evaluations required by 40 CFR 265.93(b) which is a violation of 40 CFR 265.94(a)(2)(ii) and OAC 3745-65-94(A)(2)(b).

15. On June 20, 1988, U.S. EPA sent Respondent a Notice of Violation regarding:

- a. Failure to meet the post-closure groundwater monitoring requirements, as required by 40 CFR 265.117 (OAC 3745-66-17) and 40 CFR 265.310 (OAC 3745-66-10); and
- b. Failure to include the results of statistical evaluations as specified in 40 CFR 265.93(b) and OAC 375-65-93(B) in the groundwater monitoring annual report, as required by 40 CFR 265.94 (a)(2)(ii) and OAC 3745-65-94(A)(2)(b).

16. On August 25, 1988, OEPA conducted a RCRA inspection of Respondent's facility and identified the following violation of the Federal and State Hazardous Waste Program:

The Facility failed to meet the post-closure groundwater monitoring requirements, as required by 40 CFR 265.310 (OAC 3745-66-10) and 40 CFR 265.117 (OAC 3745-66-17).

17. On September 16, 1988, OEPA sent a Notice of Violation to Respondent citing the violation found during the August 25, 1988, inspection.

18. On January 25, 1989, OEPA conducted a RCRA comprehensive groundwater monitoring evaluation of Respondent's facility and identified the following violation of the Federal and State Hazardous Waste Program:

Failure to install a groundwater monitoring system capable of determining the facility's impact on the quality of groundwater in the uppermost aquifer, as required by 40 CFR 265.90(a) and OAC 3745-65-90(A).

Specifically, in not installing groundwater monitor wells in the Lacustrine Zone and the Sandy Zone located approximately 50 - 60 feet below the facility, Ohio Waste Systems, Inc., is not adequately monitoring the uppermost aquifer.

19. On April 27, 1989, OEPA sent a Notice of Violation to Respondent citing the violation found during the January 25, 1989, inspection.

COMPLIANCE ORDER

Respondent having been initially determined to be in violation of the above cited rules and regulations, the following Compliance Order pursuant to Section 3008 of RCRA, 42 U.S.C. §6928, is entered:

A. Respondent shall, immediately upon this Order becoming final, achieve and maintain compliance with all of the groundwater monitoring requirements, including all reporting requirements, pursuant to 40 CFR 265.90 through 265.91, and OAC 3745-65-90 through 3745-65-94, except as provided in Paragraphs B and C below.

B. Respondent shall, within thirty (30) days of this Order becoming final, submit to U.S. EPA the results of a statistical evaluation for the 1987 Annual

Groundwater Monitoring Report pursuant to 40 CFR 265.93(b) that satisfies the requirements of 40 CFR 265.94(a)(2)(ii) and OAC 3745-65-94(A)(2)(b).

C. Respondent shall, within sixty (60) days of this Order becoming final, submit to U.S. EPA for approval, a post-closure groundwater monitoring plan pursuant to 40 CFR 265.117 and 40 CFR 265.310, which incorporates the required modifications of the September 25, 1987, letter submitted by U.S. EPA to Ohio Waste Systems, Inc.

D. Within thirty (30) days of U.S. EPA approval of the plan required in paragraph C above, Respondent shall implement the plan in accordance with the approved schedule.

E. Respondent shall notify U.S. EPA in writing upon achieving compliance with this Order and any part thereof. This notification shall be submitted no later than the time stipulated above to the U.S. EPA, Region V, Waste Management Division, 230 South Dearborn Street, Chicago, Illinois 60604. Attention: James Saric, RCRA Enforcement Branch, 5HR-12.

A copy of these documents and all correspondence with U.S. EPA regarding this Order shall also be submitted to Mr. Michael Savage, Division of Solid and Hazardous Waste Management, Ohio Environmental Protection Agency (OEPA), 1800 WaterMark Drive, P.O. Box 1049, Columbus, Ohio 43266-1049.

Notwithstanding any other provision of this Order, an enforcement action may be brought pursuant to Section 7003 of RCRA or other statutory authority where the handling, storage, treatment, transportation, or disposal of solid or hazardous waste at this facility may present an imminent and substantial endangerment to human health or the environment.

PROPOSED CIVIL PENALTY

In view of the above determination and in consideration of the seriousness of the violations cited herein, the potential harm to human health and the environment, and the ability of the Respondent to pay penalties, the Complainant proposes to assess a civil penalty in the amount of ONE HUNDRED THIRTY-TWO THOUSAND FOUR-HUNDRED SIXTY NINE DOLLARS (\$132,469.00) against the Respondent, Ohio Waste Systems, Inc., pursuant to Sections 3008(c) and 3008(g) of RCRA, 42 U.S.C. §6928. Payment shall be made by certified or cashier's check payable to the Treasurer of the United States of America and shall be mailed to U.S. EPA, Region V, P.O. Box 70753, Chicago, Illinois 60673. Copies of the transmittal of the payment should be sent to both the Regional Hearing Clerk, Planning and Management Division (5MF-14), and the Solid Waste and Emergency Response Branch Secretary, Office of Regional Counsel (5CS-TUB-3), U.S. EPA, 230 South Dearborn Street, Chicago, Illinois 60604.

Failure to comply with any requirements of the Order shall subject the above-named Respondent to liability for a civil penalty of up to TWENTY-FIVE THOUSAND DOLLARS (\$25,000) for each day of continued noncompliance with the deadlines contained in this Order. U.S. EPA is authorized to assess such penalties pursuant to RCRA Section 3008(c).

NOTICE OF OPPORTUNITY FOR HEARING

The above-named Respondent has the right to request a hearing to contest any material factual allegation set forth in the Complaint and Compliance Order or the appropriateness of any proposed compliance schedule or penalty. Unless Respondent has filed an answer not later than thirty (30) days from the date

this Complaint is served, Respondent may be found in default of the above Complaint and Compliance Order.

To avoid a finding of default by the Regional Administrator you must file a written answer to this Complaint with the Regional Hearing Clerk, Planning and Management Division (5MF-14), U.S. EPA Region V, 230 South Dearborn Street, Chicago, Illinois 60604, within thirty (30) days of receipt of this notice. A copy of your answer and any subsequent documents filed in this action should be sent to Larry L. Johnson, Assistant Regional Counsel (5CS-TUB-3), at the same address. Failure to answer within thirty (30) days of receipt of this Complaint may result in a finding by the Regional Administrator that the entire amount of penalty sought in the Complaint is due and payable and subject to the interest and penalty provisions contained in the Federal Claims Collection Act of 1966, 31 U.S.C. §§3701 et seq.

Your answer should clearly and directly admit, deny, or explain each of the factual allegations of which Respondent has knowledge. Said answer should contain: (1) a definite statement of the facts which constitute the grounds of defense; and (2) a concise statement of the facts which Respondent intends to place at issue in the hearing. The denial of any material fact, or the raising of any affirmative defense, shall be construed as a request for a hearing.

The Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties and the Revocation or Suspension of Permits, 40 CFR Part 22, are applicable to this administrative action. A copy of these Rules is enclosed with this Complaint.



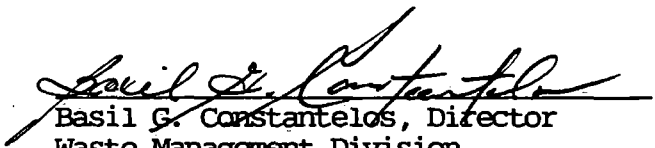
SETTLEMENT CONFERENCE

Whether or not Respondent requests a hearing, Respondent may confer informally with U.S. EPA concerning: (1) whether the alleged violations in fact occurred as set forth above; (2) the appropriateness of the compliance schedule; and (3) the appropriateness of any proposed penalty in relation to the size of Respondent's business, the gravity of the violations, and the effect of the proposed penalty on Respondent's ability to continue in business.

Respondent may request an informal settlement conference at any time by contacting this office. Any such request, however, will not affect either the thirty-day time limit for responding to this Complaint or the thirty-day time limit for requesting a formal hearing on the violations alleged herein.

U.S. EPA encourages all parties to pursue the possibilities of settlement through informal conferences. A request for an informal conference should be made in writing to Mr. James Saric, RCRA Enforcement Branch (5HR-12), at the address cited above, or by calling him at (312) 886-0992.

Dated this 22 day of Sept., 1989.

  
Basil G. Constantelos, Director  
Waste Management Division  
Complainant  
U.S. Environmental Protection Agency  
Region V

CERTIFICATE OF SERVICE

I hereby certify that I have caused a copy of the foregoing Complaint to be served upon the persons designated below, on the date below, by causing said copies to be deposited in the U.S. Mail, First Class and certified-return receipt requested, postage prepaid, at Chicago, Illinois, in envelopes addressed to:

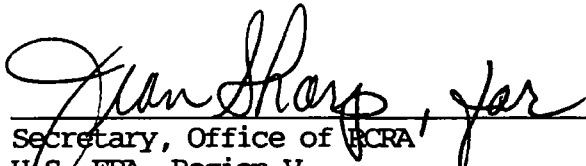
C.T. Corporation System  
Registered Agent for  
Ohio Waste Systems, Inc.      and  
815 Superior Avenue N.E.  
Cleveland, Ohio 44114

Mr. John A. Barbush  
General Manager  
Evergreen Landfill  
2625 East Broadway  
Northwood, Ohio 43619

I have further caused the original of the Complaint and this Certificate of Service to be served in the Office of the Regional Hearing Clerk located in the Planning and Management Division, U.S. EPA, Region V, 230 South Dearborn Street, Chicago, Illinois 60604, on the date below.

These are said persons' last known addresses to the subscriber.

Dated this 25 day of Sept., 1989.

  
Secretary, Office of RCRA  
U.S. EPA, Region V

ATTACHMENT 1  
PENALTY SUMMARY

Regulation Applicable at the Time of Violation	Nature of Requirement Date of Violation	Penalty Assessed
40 CFR 265.90(a)	Groundwater monitoring system not capable of determining the facility's impact on the upper- most aquifer (August 25-26, 1986; January 25, 1989)	\$121,969.00
40 CFR 265.117 & 40 CFR 265.310	Failure to comply with the post-closure groundwater monitoring requirements (June 20, 1988; August 25, 1988)	\$ 9,500.00
40 CFR 265.94(a)(2)(ii)	Failure to include the required statistical evaluations in the 1987 groundwater annual report (June 20, 1988)	\$ 1,000.00
	Total	\$132,469.00

# PENALTY COMPUTATION WORKSHEET

Company Name: ONIO WASTE SYSTEMS, INC.

Violation: OAC 3745-65-90(A) (40 CFR 265.90a) GROUND WATER MONITORING SYSTEM NOT MONITORING UPPERMOST AQUIFER.

Assessments for each violation should be determined on separate worksheets and totalled.

## Part I - Seriousness of Violation Penalty

- Potential for Harm: MAJOR
- Extent of Deviation: MAJOR
- Matrix Cell Range: \$20,000 - 25,000
- Penalty Amount Chosen: \$22,500
- Justification for Penalty Amount Chosen: MID-RANGE
- Per-Day Assessment: 22,500  
3(A) PENALTY FOR FIRST DAY OF NON-COMPLIANCE  
~~22,500~~ \$100.

## Part II - Penalty Adjustments

- |   | Percentage Change | Dollar Amount                              |
|---|-------------------|--|
| 1. Good faith efforts to comply/lack of good faith:                       |                   |  |
| 2. Degree of willfulness and/or negligence:                               |                   |  |
| 3. History of Noncompliance:  |                   |  |
| 4. Other Unique Factors:  |                   |  |
| 5. Justification for Adjustments: <u>N/A</u>                              |                   |  |
| 6. Adjusted Per-day Penalty (Line 4, Part I + Lines 1-4, Part II):        |                   | <u><del>\$22,500</del> 100.00</u>          |
| 7. Number of Days of Violation:   |                   | <u>852</u> (AUG. 1, 1987 TO NOV. 30, 1989) |
| 8. Multi-day Penalty (Number of days X Line 6, Part II):                  |                   | <u>\$85,200</u>                            |
| 9. Economic Benefit of Noncompliance:                                     |                   | <u><del>14,269</del></u>                   |
| Justification: <u>OPERATING WITHOUT PROPER G.W. MONITORING SYSTEM</u>     |                   |  |
| 10. Total (Lines 8 + 9, Part II):   |                   | <u><del>85,200</del> 121,969</u>           |
| 11. Ability to Pay Adjustment:  |                   | <u>-0-</u>                                 |
| Justification for Adjustment: <u>N/A</u>                                  |                   |  |
| 12. Total Penalty Amount (must not exceed \$25,000 per day of violation): |                   | <u><del>\$22,500</del> 121,969</u>         |

\* Percentage adjustments are applied to the dollar amount calculated on Line 4, Part I.

RCRA PENALTY COMPUTATION - JUSTIFICATION

REGULATION(S) VIOLATED: 40 CFR 265.90(a)

POTENTIAL FOR HARM CATEGORY: MAJOR

• NOT HAVING AN ADEQUATE GROUNDWATER MONITORING SYSTEM CAPABLE OF DETERMINING THE IMPACT ON THE UPPERMOST AQUIFER IS A SUBSTANTIAL THREAT TO THE ENVIRONMENT.

THIS TYPE OF VIOLATION HAS A SUBSTANTIAL ADVERSE EFFECT ON THE REGULATORY PURPOSES AND PROCEDURES FOR IMPLEMENTING THE RCRA PROGRAM.

*a release to the uppermost aquifer from the facility could go undetected.*

EXTENT OF DEVIATION CATEGORY: MAJOR

FAILURE TO INSTALL A PROPER GROUNDWATER MONITORING SYSTEM ~~IN THE~~ IN THE UPPERMOST AQUIFER, AS REQUIRED BY RCRA, IS A MAJOR DEVIATION.

PENALTY ASSESSED THIS VIOLATION: \$22,500.00

# PENALTY COMPUTATION WORKSHEET

Company Name: OHIO WASTE SYSTEMS, INC.

Violations: OAC 3745-66-10 & 3745-66-17 FAILURE TO MEET THE POST-CLOSURE GROUNDWATER MONITORING REQUIREMENTS.

Assessments for each violation should be determined on separate worksheets and totalled.

## Part I - Seriousness of Violation Penalty

- Potential for Harm: MODERATE
- Extent of Deviation: MAJOR
- Matrix Cell Range: \$8,000 - 10,999  
Penalty Amount Chosen: \$9,500  
Justification for Penalty Amount Chosen: MIDPOINT
- Per-Day Assessment: \_\_\_\_\_

## Part II - Penalty Adjustments

- |   | Percentage Change | Dollar Amount  |
|---|-------------------|----------------|
| 1. Good faith efforts to comply/lack of good faith:                       | _____             | _____          |
| 2. Degree of willfulness and/or negligence:                               | _____             | _____          |
| 3. History of Noncompliance:  | _____             | _____          |
| 4. Other Unique Factors:  | _____             | _____          |
| 5. Justification for Adjustments: <u>N/A</u>                              |                   |                |
| 6. Adjusted Per-day Penalty (Line 4, Part I + Lines 1-4, Part II):        |                   | <u>9,500</u>   |
| 7. Number of Days of Violation:   |                   | _____          |
| 8. Multi-day Penalty (Number of days x Line 6, Part II):                  |                   | _____          |
| 9. Economic Benefit of Noncompliance:                                     |                   | <u>-0-</u>     |
| Justification: <u>N/A</u>   |                   |                |
| 10. Total (Lines 8 + 9, Part II):   |                   | <u>9,500</u>   |
| 11. Ability to Pay Adjustment:  |                   |                |
| Justification for Adjustment: <u>N/A</u>                                  |                   | <u>-0-</u>     |
| 12. Total Penalty Amount (must not exceed \$25,000 per day of violation): |                   | <u>\$9,500</u> |

Percentage adjustments are applied to the dollar amount calculated on Line 4, Part I.

RCRA PENALTY COMPUTATION - JUSTIFICATION

REGULATION(S) VIOLATED: 40 CFR 265.310 & 265.117

POTENTIAL FOR HARM CATEGORY: MODERATE

FAILURE TO COMPLY WITH THE POST-CLOSURE REQUIREMENTS OF RCRA ~~IS A~~ IS A POTENTIALLY HARMFUL TO HUMAN HEALTH AND THE ENVIRONMENT.

THIS TYPE OF VIOLATION HAS A SUBSTANTIAL ADVERSE EFFECT ON THE REGULATORY PURPOSES AND PROCEDURES FOR IMPLEMENTATION OF THE RCRA PROGRAM.

EXTENT OF DEVIATION CATEGORY: MAJOR

NOT COMPLYING WITH THE POST-CLOSURE REQUIREMENTS OF RCRA IS A MAJOR DEVIATION.

PENALTY ASSESSED THIS VIOLATION: \$9,500

# PEIALTY COMPUTATION WORKSHEET

Company Name: ONIO WASTE SYSTEMS, INC.

Violation Violated: ONC 3745-65-94(A)(2)(b) FAILURE TO INCLUDE THE RESULTS OF STATISTICAL ANALYSIS IN THE ANNUAL REPORT

Assessments for each violation should be determined on separate worksheets and totalled.

## Part I - Seriousness of Violation Penalty

1. Potential for Harm: MINOR
2. Extent of Deviation: MODERATE
3. Matrix Cell Range: \$ 500-1,499  
Penalty Amount Chosen: \$ 1,000
- Justification for Penalty Amount Chosen: MID-RANGE
4. Per-Day Assessment: \_\_\_\_\_

## Part II - Penalty Adjustments

- |   | Percentage Change | Dollar Amount   |
|---|-------------------|-----------------|
| 1. Good faith efforts to comply/lack of good faith:                       | _____             | _____           |
| 2. Degree of willfulness and/or negligence:                               | _____             | _____           |
| 3. History of Noncompliance:  | _____             | _____           |
| 4. Other Unique Factors:  | _____             | _____           |
| 5. Justification for Adjustments: <u>N/A</u>                              |                   |                 |
| 6. Adjusted Per-day Penalty (Line 4, Part I + Lines 1-4, Part II):        |                   | <u>1,000</u>    |
| 7. Number of Days of Violation:   |                   | _____           |
| 8. Multi-day Penalty (Number of days X Line 6, Part II):                  |                   | _____           |
| 9. Economic Benefit of Noncompliance:                                     |                   | <u>-0-</u>      |
| Justification: <u>N/A</u>   |                   |                 |
| 10. Total (Lines 8 + 9, Part II):   |                   | <u>1,000</u>    |
| 11. Ability to Pay Adjustment:  |                   | <u>-0-</u>      |
| Justification for Adjustment: <u>N/A</u>                                  |                   |                 |
| 12. Total Penalty Amount (must not exceed \$25,000 per day of violation): |                   | <u>\$ 1,000</u> |

\* Percentage adjustments are applied to the dollar amount calculated on Line 4, Part I.



RCRA PENALTY COMPUTATION - JUSTIFICATION

REGULATION(S) VIOLATED: 40 CFR 40 CFR 265.94(a)(2)(ii)

POTENTIAL FOR HARM CATEGORY: ~~MINOR~~ THE FACILITY WAS CONDUCTING  
AND REPORTING RESULTS  
QUARTERLY SAMPLING, BUT NOT DOING THE REQUIRED STATISTICAL  
EVALUATIONS. ~~AS THE FACILITY WAS NOT DOING AN~~  
THIS VIOLATION PROVIDES A LOW LIKELY HODD OF HARM TO HUMAN HEALTH AND  
THE ENVIRONMENT.

EXTENT OF DEVIATION CATEGORY: MODERATE

FACILITY FAILED TO INCLUDE THE STATISTICAL EVALUATIONS IN THE 1987  
ANNUAL REPORT WHICH WAS SUBMITTED.

PENALTY ASSESSED THIS VIOLATION: \$1,000.00



**SENDER:** Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.  
Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. ☐ Show to whom delivered, date, and addressee's address. (Extra charge) 2. ☐ Restricted Delivery (Extra charge)

3. Article Addressed to: C.T. CORPORATION SYSTEM REGISTERED AGENT FOR OHIO WASTE SYSTEMS, INC. 815 SUPERIOR AVENUE N.E. CLEVELAND, OH 44114	4. Article Number P 109 221 550
Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise	
Always obtain signature of addressee or agent and <u>DATE DELIVERED</u> .	
5. Signature — Address X LISA A. COWARD	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature — Agent X C.T. CORPORATION SYSTEM 815 SUPERIOR AVENUE, N. E. CLEVELAND, OHIO 44114	
7. Date of Delivery SEP 29 1989	

PS Form 3811, Mar. 1988

\* U.S.G.P.O. 1988-212-865

DOMESTIC RETURN RECEIPT

**SENDER:** Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.  
Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. ☐ Show to whom delivered, date, and addressee's address. (Extra charge) 2. ☐ Restricted Delivery (Extra charge)

3. Article Addressed to: J.A. BARBUSH EVERGREEN LANDFILL 2625 E. Broadway Northwood, OH	4. Article Number 246 527 412
Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise	
Always obtain signature of addressee or agent and <u>DATE DELIVERED</u> .	
5. Signature — Address X	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature — Agent X [Signature]	
7. Date of Delivery 9/29/89	

PS Form 3811, Mar. 1988

\* U.S.G.P.O. 1988-212-865

DOMESTIC RETURN RECEIPT

USEPA - J. SARIC 5HR-12 - REB

P 109 221 550  
RECEIPT FOR CERTIFIED MAIL  
NO INSURANCE COVERAGE PROVIDED  
NOT FOR INTERNATIONAL MAIL  
(See Reverse)

Sent to C.T. CORPORATION	Street and No. 815 SUPERIOR AVENUE N.E.	P.O. State and ZIP Code CLEVELAND, OH 44114	Postage \$1.25	Certified Fee \$.55	Special Delivery Fee	Restricted Delivery Fee	Return Receipt showing to whom and Date Delivered	Return Receipt showing to whom, Date and Address of Delivery	POSTAGE and Fees	Postmark or Date
							90		3.00	

CHICAGO, ILL. SEP 29 1989



Illinois Environmental Protection Agency

P. O. Box 19276, Springfield, IL 62794-9276

217/782-6761

Refer to: 1978030004 -- Will County

UNOCAL

IL1041550567

Compliance File

November 1, 1988

UNOCAL

Attention: Leo Erchull  
135th Street & New Avenue  
Lemont, Illinois 60439

Dear Mr. Erchull:

On Jun 21, 1988, your facility was inspected by Gino Bruni of the Illinois Environmental Protection Agency. The purpose of this inspection was to determine your facility's compliance with 35 Illinois Administrative Code, Part 725, Subpart(s) F. At the time of this inspection, apparent violations found in previous inspection(s) were again observed.

For your information, a copy of the inspection report is enclosed. Should you have any questions regarding the inspection, please contact Gino Bruni at 312/345-9780.

Sincerely,

*Angela Aye Tin*

Angela Aye Tin, Manager  
Technical Compliance Unit  
Compliance Section  
Division of Land Pollution Control

AAT:GB:BN:jld/3333j/58

Enclosure

cc: Division File  
Maywood Region ✓  
Brian White  
Clady Davis

RECEIVED

NOV 7 1988

ILL. E.P.A. - D.L.P.C.  
STATE OF ILLINOIS



OCT 26 1987

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

230 SOUTH DEARBORN ST.

CHICAGO, ILLINOIS 60604

REPLY TO THE ATTENTION OF:  
5HE-12

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Walter W. Crim, Esquire  
Unocal Corporation  
1201 West 5th Street  
P.O. Box 7600  
Los Angeles, California 90051

Re: Consent Agreement and  
Final Order  
Union Oil Company of California  
Lemont, Illinois  
Docket No. V-W-87-R-015

Dear Mr. Crim:

This letter is to acknowledge receipt of the Consent Agreement and Final Order signed by Unocal Corporation. A fully executed copy of the Consent Agreement and Final Order is enclosed for your file.

Your cooperation in resolving this matter is appreciated.

Sincerely yours,

William H. Miner, Chief  
Hazardous Waste Enforcement Branch

Enclosure

cc: w/enclosures  
D. W. Bruckert, Supervisor  
Larry Eastep, IEPA  
Gary King, IEPA  
Linda Kissinger, IEPA  
Glenn Savage, IEPA



P 298 721 473

# RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED

NOT FOR INTERNATIONAL MAIL

(See Reverse)

★ U.S.G.P.O. 1985-480-794

PS Form 3800, June 1985

Sent to	
Walter W. Crim, Esquire	
Unocal Corporation	
1201 West 5th Street	
P.O. Box 7600	
Los Angeles, California	
Postage	90051 .58
Certified Fee	.75
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	70
Return Receipt showing to whom Date, and Address of Delivery	
TOTAL Postage and Fees	\$ 2.01
Postmark or Date	



J. Cooper (5HE-12) USEPA, 230 S. Dearborn, Chgo, IL. 60602

**STICK POSTAGE STAMPS TO ARTICLE TO COVER FIRST CLASS POSTAGE,  
CERTIFIED MAIL FEE, AND CHARGES FOR ANY SELECTED OPTIONAL SERVICES. (see front)**

1. If you want this receipt postmarked, stick the gummed stub to the right of the return address leaving the receipt attached and present the article at a post office service window or hand it to your rural carrier. (no extra charge)
2. If you do not want this receipt postmarked, stick the gummed stub to the right of the return address of the article, date, detach and retain the receipt, and mail the article.
3. If you want a return receipt, write the certified mail number and your name and address on a return receipt card, Form 3811, and attach it to the front of the article by means of the gummed ends if space permits. Otherwise, affix to back of article. Endorse front of article **RETURN RECEIPT REQUESTED** adjacent to the number.
4. If you want delivery restricted to the addressee, or to an authorized agent of the addressee, endorse **RESTRICTED DELIVERY** on the front of the article.
5. Enter fees for the services requested in the appropriate spaces on the front of this receipt. If return receipt is requested, check the applicable blocks in item 1 of Form 3811.
6. Save this receipt and present it if you make inquiry.

UNITED STATES POSTAL SERVICE  
OFFICIAL BUSINESS

SENDER INSTRUCTIONS

Print your name, address, and ZIP Code in the space below.

- Complete items 1, 2, 3, and 4 on the reverse.
- Attach to front of article if space permits, otherwise affix to back of article.
- Endorse article "Return Receipt Requested" adjacent to number.



PENALTY FOR PRIVATE  
USE, \$300

RETURN  
TO



Print Sender's name, address, and ZIP Code in the space below.

Jonathan Cooper (5HE-12)

U.S. ENVIRONMENTAL PRO. AGENCY  
REGION V  
230 SOUTH DEARBORN  
CHICAGO IL 60604

● **SENDER:** Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.

Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. ☒ Show to whom delivered, date, and addressee's address.  
↑(Extra charge)↑
2. ☐ Restricted Delivery  
↑(Extra charge)↑

3. Article Addressed to:

Walter W. Crim, Esquire  
Unocal Corporation  
1201 West 5th Street  
P.O. Box 7600  
Los Angeles, California 90051

#### 4. Article Number

P 298 721 473

Type of Service:

- ☐ Registered      ☐ Insured  
☒ ~~Certified~~      ☐ COD  
☐ Express Mail

Always obtain signature of addressee  
or agent and DATE DELIVERED.

### 5. Signature – Addressee

X

6. Signature — Agent

X

7. Date of Delivery

8. Addressee's Address (*ONLY if requested and fee paid*)

OCT 30 1987

CAFO

UNION OIL

87-R-015



bcc: w/enclosures ✓  
 Regional Hearing Clerk ✓  
 Mary Hay, ORC ✓  
 J. Cooper, RES ✓  
 D. Reape, SHE ✓  
 R. Small, OWPE, WH-527 ✓

① Zotomayr SMF ✓

✓  
 SHE-12:Cooper:lr:10/8/87

INIT. DATE	TYPEST	AUTHOR	OTHER STAFF	IC/IN SECT. CHIEF	SECT. STAFF	SECT. CHIEF	HWB CHIEF	WMD CHIEF
	LC	JC		g MB	ap	WEm		
10/8/87	10/8/87	10/8/87		10/9/87	10/9/87	10/9/87		

Walt 10/26

DM 10/20/87  
 need 10/20

10/23/87

20 10/15/88  
 10/16/88



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION V

IN THE MATTER OF:

UNION OIL COMPANY OF CALIFORNIA  
CHICAGO REFINERY  
135TH STREET AND NEW AVENUE  
LEMONT, ILLINOIS 60439

ILD 041 550 567

)  
) DOCKET NO. V-W-87-R-015  
)  
)

) CONSENT AGREEMENT AND  
) FINAL ORDER  
)  
)  
)

PREAMBLE

On December 17, 1986, a Complaint and Compliance Order was filed in this matter pursuant to Section 3008(a)(1) of the Resource Conservation and Recovery Act of 1976 (RCRA), as amended, 42 U.S.C. §6928(a)(1), and the United States Environmental Protection Agency's Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties and the Revocation or Suspension of Permits, 40 CFR Part 22. The Complainant is the Director of the Waste Management Division, Region V, United States Environmental Protection Agency (U.S. EPA). The Respondent is Union Oil Company of California located at 135th Street and New Avenue, Lemont, Illinois.

STIPULATIONS

The parties to this action, desiring to settle this action, enter into the following stipulations:

1. Respondent has been served with a copy of the Complaint and Notice of Opportunity for hearing in this matter.
2. The Regional Administrator has jurisdiction over this matter pursuant to Section 3008(a)(2) of RCRA, 42 U.S.C. §6928(a)(2), which provides

that U.S. EPA may enforce state regulations in those states authorized to administer a hazardous waste program. On January 30, 1986, the State of Illinois was granted final authorization by the Administrator of U.S. EPA, pursuant to Section 3006(b) of RCRA, 42 U.S.C. §6926(b), to administer a hazardous waste program in lieu of the Federal program.

3. Respondent owns and operates a facility located at 135th Street and New Avenue in Lemont, Illinois known as the Chicago Refinery. Respondent is a California corporation whose registered agent in Illinois is C.T. Corporation System.
4. Respondent neither admits nor denies the administrative factual allegations contained in the Complaint filed herein.
5. Respondent explicitly waives the right to request a hearing on the allegations in the Complaint filed herein.
6. Respondent consents to the issuance of the Order hereinafter recited and hereby consents to the payment of a civil penalty in the amount hereinafter stipulated. The penalty is to be paid within thirty (30) days of the effective date of this Consent Agreement and Final Order.
7. This Consent Agreement and Final Order shall become effective on the date it is signed by the Regional Administrator.

ORDER

Based upon the foregoing stipulations, the parties agree to the entry of the following Order in this matter:

A. Respondent has submitted to U.S. EPA and the Illinois Environmental Protection Agency (IEPA) for approval, a revised plan and schedule for supplemental hydrogeologic investigations at the Lemont facility. Upon approval the plan shall be implemented in accordance with the methods stated therein. The report generated from the investigation shall be prepared by a qualified geologist or geotechnical engineer and submitted to U.S. EPA and IEPA within 120 days of the effective date of this CAFO and shall include at a minimum:

1. Continuous lithologic description in borehole logs for boreholes B-1 through B-10, and in all other borehole logs, the description of geologic information collected at a minimum sampling interval of five (5) feet;
2. Identification, and corroborating cross-sections, of the differentiated lithologic/hydrostratigraphic units extending from the ground surface into the dolomite bedrock;
3. From those lithologic/hydrostratigraphic units identified in A(2) above, state which units are aquifers, as defined at 35 Ill. Adm. Code 720.110, and which units are not aquifers;
4. Identification of any and all lithologic/hydrostratigraphic units which comprise the uppermost aquifer, as defined at 35 Ill. Adm. Code 720.110. Exclusion of any aquifer units identified in A (3) above from inclusion within units stated to comprise the uppermost

aquifer must be based on a determination of the hydraulic interconnection among the lithologic/hydrostratigraphic units.

5. Potentiometric maps indicating the ground-water flow direction(s) within each lithologic/hydrostratigraphic unit comprising the uppermost aquifer.

B. Within thirty (30) days of submittal of the report summarizing the investigation's findings, Respondent shall submit a plan and schedule to U.S. EPA and IEPA for the establishment of a system of ground-water monitoring wells for the hazardous waste land treatment areas. The monitoring system shall satisfy the requirements of 35 Ill. Adm. Code Part 725 Subpart F. The plan must specify the number, location, and depth of all proposed new monitoring wells and the proposed construction details and specifications for each. The proposed plan must state the basis for well locations and the reasoning for or against the installation of nested wells. Upgradient wells must be able to yield samples representative of background water quality not affected by the facility. Downgradient wells must be located at the limit of the waste management area and be sufficient in number, location, and depth to ensure immediate detection of any statistically significant amounts of hazardous waste or hazardous waste constituents that may migrate from the hazardous waste management area.

Upon receipt of approval from U.S. EPA and IEPA of the ground-water monitoring plan submitted pursuant to this paragraph, Respondent shall implement the system as approved and in accordance with the approved schedule.

C. Respondent shall implement sampling and analysis of ground water in all newly-installed wells as soon as technically feasible, but not more than thirty (30) days after all wells have been installed, developed, and ground-water levels have stabilized. The following procedures shall be performed:

1. The ground water shall be analyzed for the concentration or value of the parameters specified in 35 Ill. Adm. Code 725.192(b)(1) through (b)(3) in accordance with the schedules specified in 725.192 (c) and (d).
2. Elevation of the ground-water surface at each monitoring well shall be determined at each sampling event, as specified at 35 Ill. Adm. Code 725.192(e).
3. Concurrently with performing paragraph C(1) above, for each indicator parameter specified in 35 Ill. Adm. Code 725.192(b)(3), calculate the arithmetic mean and variance, based on at least four replicate measurements on each sample for each well and compare those results with each indicator parameter's initial background arithmetic mean which has been established previously by pooling all data from the initial year's sampling of upgradient wells where said wells are unaffected by the facility's regulated units. If no previously-existing monitoring wells at Respondent's facility are in an assessment monitoring program at the time of this initial sampling of new wells and no statistically significant increases are indicated in new wells, Respondent shall continue in the indicator evaluation program. Analytical data and

determinations based on them shall be submitted to IEPA to support Respondent's continuation of that program.

D. However, if the initial sampling and analysis described in paragraph C indicates statistically significant changes in indicator parameter values of ground water from new downgradient wells, or if Respondent was in an assessment monitoring program during the initial sampling, Respondent shall develop and submit to IEPA a specific ground-water quality assessment program plan within fifteen (15) days of notification of IEPA under 35 Ill. Adm. Code 725.193 (d)(1). The plan is required under 35 Ill. Adm. Code 725.193(d)(2) and must describe a program which addresses all the newly-installed wells and specifies the contents required by 35 Ill. Adm. Code 725.193(d)(3).

Respondent shall include, as part of the ground-water quality assessment program plan, the sampling of all newly-installed monitoring wells for the presence of hazardous waste or hazardous waste constituents (i.e., those wastes listed in Appendix G of 35 Ill. Adm. Code Part 721 and all constituents listed in Table I of 35 Ill. Adm. Code 721.124 corresponding to Respondent's land-treated hazardous wastes).

Respondent shall implement the ground-water quality assessment program plan as approved by IEPA.

E. Respondent shall, in all future ground-water sampling events under 35 Ill. Adm. Code 725.192(d)(2), strictly comply with:

1. Immediate resampling requirements under 35 Ill. Adm. Code 725.193(c)(2) when a statistically significant increase (or pH decrease) is detected

in a downgradient well;

2. Notification of the Director of IEPA within seven (7) days of the date of confirmation of a significant increase (or pH decrease) indicating that the facility may be affecting ground-water quality, as stated at 35 Ill. Adm. Code 725.193(d)(1);
3. Submittal of a ground-water quality assessment program plan to the Director of IEPA within fifteen (15) days after notification to IEPA of a significant increase (or pH decrease), as required by 35 Ill. Adm. Code 725.193(d)(2); and
4. Submittal, as part of future annual reports, of an evaluation of ground-water surface elevations and a description of the response to that evaluation where applicable. This requirement is stated at 35 Ill. Adm. Code 725.194(a)(2)(C) and 35 Ill. Adm. Code 725.193(f).

F. Should U.S. EPA disapprove any plan or monitoring program submitted under this Order, Respondent shall have the opportunity to request a conference before such disapproval becomes final. The conference shall be requested within ten (10) days of the date of the disapproval and held as soon thereafter as can be arranged by the parties. At or before such conference, Respondent can present any additional documents supporting any disagreement with the disapproval. Following such conference U.S. EPA will either affirm, modify, or rescind its original disapproval in writing.

G. Should Respondent be unable to comply with the agreed upon schedule for completion of the hydrogeologic investigation or future implementation



schedules approved during the execution of this Order for the installation of additional wells, sampling and analysis, etc., due to circumstances beyond its reasonable control, such failure to comply with the scheduled dates shall not be considered a violation of the Order. Respondent, however, in order to assert this defense for failure to meet the scheduled dates shall within ten (10) days after the scheduled dates so notify U.S. EPA in writing. The notice shall explain the circumstances, reasons and duration of the delay, and any steps taken to minimize the delay. Should U.S. EPA determine that the delay is not justified, it shall notify Respondent, which will have the right to request a conference under paragraph F, within ten (10) days after its receipt of such notice.

H. Respondent shall pay a civil penalty in the amount of SEVEN THOUSAND SIX HUNDRED DOLLARS (\$7,600) within thirty (30) days of the effective date of this Order. The civil penalty is payable to the Treasurer of the United States of America and shall be mailed to U.S. EPA, Region V, P.O. Box 70753, Chicago, Illinois 60673. A copy of the transmittal of payment shall be mailed to the Regional Hearing Clerk, Planning and Management Division, U.S. EPA, 230 South Dearborn Street, Chicago, Illinois 60604 and to the Office of Regional Counsel, SWER Branch Secretary (5CS-16), 230 South Dearborn Street, Chicago, Illinois 60604.

I. Respondent shall notify U.S. EPA and IEPA in writing as compliance is achieved with the individual paragraphs of this Order. This notification shall be submitted to U.S. EPA, Region V, Waste Management Division, 230 South Dearborn Street, Chicago, Illinois 60604, Attention: Jonathan Cooper, RCRA Enforcement Section, 5HE-12.

A copy of these documents and all correspondence with U.S. EPA regarding this Order shall also be submitted to: Gary King, Senior Attorney, Illinois Environmental Protection Agency, Division of Land Pollution Control, 2200 Churchill Road, Springfield, Illinois 62706.

J. Failure to comply with any requirement of this Order may subject Respondent to liability for a penalty of up to TWENTY-FIVE THOUSAND DOLLARS (\$25,000) for each day of continued noncompliance with the terms of this Order. U.S. EPA is authorized to assess such penalties pursuant to RCRA Section 3008(c).

K. Interest shall accrue on any amount overdue under the terms of this Order at the rate established by the Secretary of the Treasury pursuant to 31 U.S.C. §3717. A late payment charge of \$20.00 will be imposed after thirty (30) days, with an additional charge of \$10.00 for each subsequent 30-day period over which an unpaid balance remains. In addition, a six percent per annum penalty will be applied on any principal amount not paid within ninety (90) days of the date that this Order is signed by the Regional Administrator.

Notwithstanding any other provisions of this Order, an enforcement action may be brought pursuant to Section 7003 of RCRA or other statutory provisions should U.S. EPA find that the handling, storage, treatment, transportation or disposal of solid waste or hazardous waste at the facility may present an imminent and substantial endangerment to human health and environment.

SIGNATORIES

Each undersigned representative of a signatory to this Consent Agreement and Final Order certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Order and to legally bind such signatory to this document.

Agreed this 29<sup>TH</sup> day of SEPTEMBER, 1987.

By Thomas B. Will  
Union Oil Company of California  
Respondent *THC*  
*1743*

Agreed this 23<sup>rd</sup> day of October, 1987.

By Basil G. Constantelos  
Basil G. Constantelos, Director  
Waste Management Division  
U.S. Environmental Protection Agency  
Region V, Complainant

The above being agreed and consented to, it is so ordered

this 23<sup>rd</sup> day of October, 1987.

By Valdas V. Adamkus  
Valdas V. Adamkus  
Regional Administrator  
U.S. Environmental Protection Agency  
Region V



OCT 23 1987

CAFO for Execution for Union Oil Company  
of California, Chicago Refinery  
Docket No. V-W-87-R-015

Robert B. Schaefer  
Regional Counsel

and

Basil G. Constantelos, Director  
Waste Management Division

Valdas V. Adamkus  
Regional Administrator

Attached for your review and signature is a Consent Agreement and Final Order (CAFO) the terms of which require Union Oil Company of California (Unocal) to conduct further hydrogeologic investigations at its Chicago Refinery located in Lemont, Illinois. The CAFO also requires Unocal to submit a report on the findings of the hydrogeologic investigations and, based on that report, submit a plan and schedule for establishing an adequate system of ground-water monitoring wells for its land treatment areas. Sampling and analysis procedures and schedules to be followed, after implementation of an adequate system of ground-water monitoring wells, is specified in the CAFO.

Unocal is assessed a civil penalty of \$7,600. The original penalty was \$9,500. We recommend that you sign the order on behalf of Region V. When execution of signatures is complete, please return the signed CAFO to William H. Miner, Chief of the Hazardous Waste Enforcement Branch, for proper distribution of signed copies.

Attachment

5HE-12:Cooper:lr:10/8/87:#

11/11

	TYPIST	AUTHOR	OTHER STAFF	UNIT CHIEF	STUD. SECT.	SECT. CHIEF	ENR. CHIEF	WMD DIR
INIT. DATE	HL 10/9/87	JC 10/9/87		JMB 10/9/87	AP 10/9/87	WEH 10/9/87	WHR 10/9/87	WHR 10/9/87

JP 10/15/87

DPY  
10/20/87  
WHR 10/20

WEH 10/16/87  
WHR 10/15/87

EP 10-23-87





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

230 SOUTH DEARBORN ST.

CHICAGO, ILLINOIS 60604

REPLY TO THE ATTENTION OF:

5HE-12

RECEIVED

SEP 21 1987

SOLID WASTE BRANCH  
U.S. EPA, REGION V

SEP 21 1987

Ms. Margaret Eriksen  
Route 4  
Box 140A  
Lockport, Illinois 60441

Re: Unocal  
ILD 041 550 567

Dear Ms. Eriksen:

My staff has reviewed a copy of your letter of August 21, 1987, addressed to Mr. Clifford Gould of the Illinois Environmental Protection Agency (IEPA) in Maywood, Illinois. You described "severe odor problems in the area" which occurred about one month prior to the date of your letter. Mr. Bill Papadakis of IEPA investigated this matter, following a phone call from you, and reported that the land treatment area was dry and that the odor was originating from a retention pond for wastewaters from Unocal's operating processes.

The Illinois Unit of the Solid Waste Branch of the United States Environmental Protection Agency (U.S. EPA) is currently conducting a Resource Conservation and Recovery Act (RCRA) Facility Assessment (an RFA) at Unocal. The RFA attempts to identify potential releases of hazardous waste to the environment by any medium (e.g., surface water, ground water, soils). If a need for any sampling is indicated, a sampling investigation will be undertaken by U.S. EPA. If potential releases to the environment were then evident, Unocal would be required to conduct a RCRA Facility Investigation. If that investigation indicates releases of hazardous waste to the environment, corrective action would then be required of Unocal. However, currently applicable standards do not directly address odor control or require any mechanism by which to reduce it.

If you have any further questions regarding this matter, please contact Jonathan Cooper of my staff at (312) 886-4464.

Sincerely yours,

*Sally K Swanson*

William E. Muno, Chief  
RCRA Enforcement Section

cc: D. Bruckert, Unocal  
C. Gould, Maywood IEPA



bcc: J. Mayka:SWB

5HE-12:Cooper:lr:8/16/87:#27

	TYPIST	AUTHOR	OTHER STAFF	<sup>141N</sup> UNIT CHIEF	SECT. SEC'Y	SECT. CHIEF	HWB CHIEF	WMD DIR
INIT. DATE	LR 9/16/87	gc 9/16/87		JMB 9/17/87	AP 9/17/87	SXS for WMD 9/17/87		

Cooper



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

230 SOUTH DEARBORN ST.

CHICAGO, ILLINOIS 60604

SEP 4 1987

REPLY TO THE ATTENTION OF:

SHE-12

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Mr. Walter W. Crim  
Unocal Corporation  
1201 West 5th Street  
P.O. Box 7600  
Los Angeles, California 90051

Re: Consent Agreement and Final  
Order  
Union Oil Company of California  
Docket No. V-W-87-R-015

Dear Mr. Crim:

I have enclosed herewith the third draft Consent Agreement and Final Order (CAFO). Please review the CAFO and if acceptable have the two originals signed by the appropriate party or parties within two weeks of your receipt of this letter and return them to me. The United States Environmental Protection Agency will then sign both documents and return one to you.

We are hoping that this third and final draft CAFO will resolve our differences. While this may not be a perfect document from your point of view, I believe it represents our best effort. Therefore, I urge you to sign it and avoid litigation. If you do not intend to sign it, please call me immediately so that we may apprise the judge of our deadlock in negotiations.

Sincerely,

  
Mary E. Hay  
Assistant Regional Counsel

Enclosures

cc: w/enclosures  
D. W. Bruckert, Supervisor  
UNOCAL Corporation



SEP 4 1987

5HE-12

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Mr. Walter W. Crim  
Unocal Corporation  
1201 West 5th Street  
P.O. Box 7600  
Los Angeles, California 90051

Re: Consent Agreement and Final  
Order  
Union Oil Company of California  
Docket No. V-W-87-R-015

Dear Mr. Crim:

I have enclosed herewith the third draft Consent Agreement and Final Order (CAFO). Please review the CAFO and if acceptable have the two originals signed by the appropriate party or parties within two weeks of your receipt of this letter and return them to me. The United States Environmental Protection Agency will then sign both documents and return one to you.

We are hoping that this third and final draft CAFO will resolve our differences. While this may not be a perfect document from your point of view, I believe it represents our best effort. Therefore, I urge you to sign it and avoid litigation. If you do not intend to sign it, please call me immediately so that we may apprise the judge of our deadlock in negotiations.

Sincerely,

Mary E. Hay  
Assistant Regional Counsel

Enclosures

cc: w/enclosures  
D. W. Bruckert, Supervisor  
UNOCAL Corporation

bcc: w/enclosures  
J. Cooper, RES  
Mary Hay, ORC

5HE-12:JCooper:nd

	TYPIST	AUTHOR	OTHER STAFF	UNIT CHIEF	FILE CLERK	SECRET CHIEF	INVEST CHIEF	WMD DIR
DATE	8/28/87	JC	MEH					
6-4464	8/28/87	8/28/87	9-4-87					



IN THE MATTER OF:

UNION OIL COMPANY OF CALIFORNIA  
CHICAGO REFINERY  
135TH STREET AND NEW AVENUE  
LEMONT, ILLINOIS 60439

ILD 041 550 567

DOCKET NO. V-W-87-R-015

CONSENT AGREEMENT AND  
FINAL ORDER

## PREAMBLE

On December 17, 1986, a Complaint and Compliance Order was filed in this matter pursuant to Section 3008(a)(1) of the Resource Conservation and Recovery Act of 1976 (RCRA), as amended, 42 U.S.C. §6928(a)(1), and the United States Environmental Protection Agency's Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties and the Revocation or Suspension of Permits, 40 CFR Part 22. The Complainant is the Director of the Waste Management Division, Region V, United States Environmental Protection Agency (U.S. EPA). The Respondent is Union Oil Company of California located at 135th Street and New Avenue, Lemont, Illinois.

## STIPULATIONS

The parties to this action, desiring to settle this action, enter into the following stipulations:

1. Respondent has been served with a copy of the Complaint and Notice of Opportunity for hearing in this matter.
2. The Regional Administrator has jurisdiction over this matter pursuant to Section 3008(a)(2) of RCRA, 42 U.S.C. §6928(a)(2), which provides

that U.S. EPA may enforce state regulations in those states authorized to administer a hazardous waste program. On January 30, 1986, the State of Illinois was granted final authorization by the Administrator of U.S. EPA, pursuant to Section 3006(b) of RCRA, 42 U.S.C. §6926(b), to administer a hazardous waste program in lieu of the Federal program.

3. Respondent owns and operates a facility located at 135th Street and New Avenue in Lemont, Illinois known as the Chicago Refinery. Respondent is a California corporation whose registered agent in Illinois is C.T. Corporation System.
4. Respondent neither admits nor denies the administrative factual allegations contained in the Complaint filed herein.
5. Respondent explicitly waives the right to request a hearing on the allegations in the Complaint filed herein.
6. Respondent consents to the issuance of the Order hereinafter recited and hereby consents to the payment of a civil penalty in the amount hereinafter stipulated. The penalty is to be paid within thirty (30) days of the effective date of this Consent Agreement and Final Order.
7. This Consent Agreement and Final Order shall become effective on the date it is signed by the Regional Administrator.

ORDER

Based upon the foregoing stipulations, the parties agree to the entry of the following Order in this matter:

A. Respondent has submitted to U.S. EPA and the Illinois Environmental Protection Agency (IEPA) for approval, a revised plan and schedule for supplemental hydrogeologic investigations at the Lemont facility. Upon approval the plan shall be implemented in accordance with the methods stated therein. The report generated from the investigation shall be prepared by a qualified geologist or geotechnical engineer and submitted to U.S. EPA and IEPA within 120 days of the effective date of this CAFO and shall include at a minimum:

1. Continuous lithologic description in borehole logs for boreholes B-1 through B-10, and in all other borehole logs, the description of geologic information collected at a minimum sampling interval of five (5) feet;
2. Identification, and corroborating cross-sections, of the differentiated lithologic/hydrostratigraphic units extending from the ground surface into the dolomite bedrock;
3. From those lithologic/hydrostratigraphic units identified in A(2) above, state which units are aquifers, as defined at 35 Ill. Adm. Code 720.110, and which units are not aquifers;
4. Identification of any and all lithologic/hydrostratigraphic units which comprise the uppermost aquifer, as defined at 35 Ill. Adm. Code 720.110. Exclusion of any aquifer units identified in A (3) above from inclusion within units stated to comprise the uppermost

aquifer must be based on a determination of the hydraulic interconnection among the lithologic/hydrostratigraphic units.

5. Potentiometric maps indicating the ground-water flow direction(s) within each lithologic/hydrostratigraphic unit comprising the uppermost aquifer.

B. Within thirty (30) days of submittal of the report summarizing the investigation's findings, Respondent shall submit a plan and schedule to U.S. EPA and IEPA for the establishment of a system of ground-water monitoring wells for the hazardous waste land treatment areas. The monitoring system shall satisfy the requirements of 35 Ill. Adm. Code Part 725 Subpart F. The plan must specify the number, location, and depth of all proposed new monitoring wells and the proposed construction details and specifications for each. The proposed plan must state the basis for well locations and the reasoning for or against the installation of nested wells. Upgradient wells must be able to yield samples representative of background water quality not affected by the facility. Downgradient wells must be located at the limit of the waste management area and be sufficient in number, location, and depth to ensure immediate detection of any statistically significant amounts of hazardous waste or hazardous waste constituents that may migrate from the hazardous waste management area.

Upon receipt of approval from U.S. EPA and IEPA of the ground-water monitoring plan submitted pursuant to this paragraph, Respondent shall implement the system as approved and in accordance with the approved schedule.

C. Respondent shall implement sampling and analysis of ground water in all newly-installed wells as soon as technically feasible, but not more than thirty (30) days after all wells have been installed, developed, and ground-water levels have stabilized. The following procedures shall be performed:

1. The ground water shall be analyzed for the concentration or value of the parameters specified in 35 Ill. Adm. Code 725.192(b)(1) through (b)(3) in accordance with the schedules specified in 725.192 (c) and (d).
2. Elevation of the ground-water surface at each monitoring well shall be determined at each sampling event, as specified at 35 Ill. Adm. Code 725.192(e).
3. Concurrently with performing paragraph C(1) above, for each indicator parameter specified in 35 Ill. Adm. Code 725.192(b)(3), calculate the arithmetic mean and variance, based on at least four replicate measurements on each sample for each well and compare those results with each indicator parameter's initial background arithmetic mean which has been established previously by pooling all data from the initial year's sampling of upgradient wells where said wells are unaffected by the facility's regulated units. If no previously-existing monitoring wells at Respondent's facility are in an assessment monitoring program at the time of this initial sampling of new wells and no statistically significant increases are indicated in new wells, Respondent shall continue in the indicator evaluation program. Analytical data and

determinations based on them shall be submitted to IEPA to support Respondent's continuation of that program.

D. However, if the initial sampling and analysis described in paragraph C indicates statistically significant changes in indicator parameter values of ground water from new downgradient wells, or if Respondent was in an assessment monitoring program during the initial sampling, Respondent shall develop and submit to IEPA a specific ground-water quality assessment program plan within fifteen (15) days of notification of IEPA under 35 Ill. Adm. Code 725.193 (d)(1). The plan is required under 35 Ill. Adm. Code 725.193(d)(2) and must describe a program which addresses all the newly-installed wells and specifies the contents required by 35 Ill. Adm. Code 725.193(d)(3).

Respondent shall include, as part of the ground-water quality assessment program plan, the sampling of all newly-installed monitoring wells for the presence of hazardous waste or hazardous waste constituents (i.e., those wastes listed in Appendix G of 35 Ill. Adm. Code Part 721 and all constituents listed in Table I of 35 Ill. Adm. Code 721.124 corresponding to Respondent's land-treated hazardous wastes).

Respondent shall implement the ground-water quality assessment program plan as approved by IEPA.

E. Respondent shall, in all future ground-water sampling events under 35 Ill. Adm. Code 725.192(d)(2), strictly comply with:

1. Immediate resampling requirements under 35 Ill. Adm. Code 725.193(c)(2) when a statistically significant increase (or pH decrease) is detected

in a downgradient well;

2. Notification of the Director of IEPA within seven (7) days of the date of confirmation of a significant increase (or pH decrease) indicating that the facility may be affecting ground-water quality, as stated at 35 Ill. Adm. Code 725.193(d)(1);
3. Submittal of a ground-water quality assessment program plan to the Director of IEPA within fifteen (15) days after notification to IEPA of a significant increase (or pH decrease), as required by 35 Ill. Adm. Code 725.193(d)(2); and
4. Submittal, as part of future annual reports, of an evaluation of ground-water surface elevations and a description of the response to that evaluation where applicable. This requirement is stated at 35 Ill. Adm. Code 725.194(a)(2)(C) and 35 Ill. Adm. Code 725.193(f).

F. Should U.S. EPA disapprove any plan or monitoring program submitted under this Order, Respondent shall have the opportunity to request a conference before such disapproval becomes final. The conference shall be requested within ten (10) days of the date of the disapproval and held as soon thereafter as can be arranged by the parties. At or before such conference, Respondent can present any additional documents supporting any disagreement with the disapproval. Following such conference U.S. EPA will either affirm, modify, or rescind its original disapproval in writing.

G. Should Respondent be unable to comply with the agreed upon schedule for completion of the hydrogeologic investigation or future implementation

schedules approved during the execution of this Order for the installation of additional wells, sampling and analysis, etc., due to circumstances beyond its reasonable control, such failure to comply with the scheduled dates shall not be considered a violation of the Order. Respondent, however, in order to assert this defense for failure to meet the scheduled dates shall within ten (10) days after the scheduled dates so notify U.S. EPA in writing. The notice shall explain the circumstances, reasons and duration of the delay, and any steps taken to minimize the delay. Should U.S. EPA determine that the delay is not justified, it shall notify Respondent, which will have the right to request a conference under paragraph F, within ten (10) days after its receipt of such notice.

H. Respondent shall pay a civil penalty in the amount of SEVEN THOUSAND SIX HUNDRED DOLLARS (\$7,600) within thirty (30) days of the effective date of this Order. The civil penalty is payable to the Treasurer of the United States of America and shall be mailed to U.S. EPA, Region V, P.O. Box 70753, Chicago, Illinois 60673. A copy of the transmittal of payment shall be mailed to the Regional Hearing Clerk, Planning and Management Division, U.S. EPA, 230 South Dearborn Street, Chicago, Illinois 60604 and to the Office of Regional Counsel, SWER Branch Secretary (5CS-16), 230 South Dearborn Street, Chicago, Illinois 60604.

I. Respondent shall notify U.S. EPA and IEPA in writing as compliance is achieved with the individual paragraphs of this Order. This notification shall be submitted to U.S. EPA, Region V, Waste Management Division, 230 South Dearborn Street, Chicago, Illinois 60604, Attention: Jonathan Cooper, RCRA Enforcement Section, 5HE-12.



A copy of these documents and all correspondence with U.S. EPA regarding this Order shall also be submitted to: Gary King, Senior Attorney, Illinois Environmental Protection Agency, Division of Land Pollution Control, 2200 Churchill Road, Springfield, Illinois 62706.

J. Failure to comply with any requirement of this Order may subject Respondent to liability for a penalty of up to TWENTY-FIVE THOUSAND DOLLARS (\$25,000) for each day of continued noncompliance with the terms of this Order. U.S. EPA is authorized to assess such penalties pursuant to RCRA Section 3008(c).

K. Interest shall accrue on any amount overdue under the terms of this Order at the rate established by the Secretary of the Treasury pursuant to 31 U.S.C. §3717. A late payment charge of \$20.00 will be imposed after thirty (30) days, with an additional charge of \$10.00 for each subsequent 30-day period over which an unpaid balance remains. In addition, a six percent per annum penalty will be applied on any principal amount not paid within ninety (90) days of the date that this Order is signed by the Regional Administrator.

Notwithstanding any other provisions of this Order, an enforcement action may be brought pursuant to Section 7003 of RCRA or other statutory provisions should U.S. EPA find that the handling, storage, treatment, transportation or disposal of solid waste or hazardous waste at the facility may present an imminent and substantial endangerment to human health and environment.

SIGNATORIES

Each undersigned representative of a signatory to this Consent Agreement and Final Order certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Order and to legally bind such signatory to this document.

Agreed this \_\_\_\_\_ day of \_\_\_\_\_, 1987.

By \_\_\_\_\_  
Union Oil Company of California  
Respondent

Agreed this \_\_\_\_\_ day of \_\_\_\_\_, 1987.

By \_\_\_\_\_  
Basil G. Constantelos, Director  
Waste Management Division  
U.S. Environmental Protection Agency  
Region V, Complainant

The above being agreed and consented to, it is so ordered

this \_\_\_\_\_ day of \_\_\_\_\_, 1987.

By \_\_\_\_\_  
Valdas V. Adamkus  
Regional Administrator  
U.S. Environmental Protection Agency  
Region V

P 611 587 069

USEPA

## RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED  
NOT FOR INTERNATIONAL MAIL

(See Reverse)

\* U.S.G.P.O. 1983-403-517

PS Form 3800, Feb. 1982

Sent to Mr. Walter Crim Unocal Corp.	
Street and No. 1201 W. 5th Street	
P.O. Box 7600	
P.O., State and ZIP Code Los Angeles, California 90051	
Postage	\$ .90
Certified Fee	.75
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	.70
Return receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$ 2.35
Postmark or Date	

J. Cooper (5HE-12)  
230 S. Dearborn, Chicago, Illinois

## ● SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.

Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. ☐ Show to whom delivered, date, and addressee's address. 2. ☐ Restricted Delivery.

## 3. Article Addressed to:

Mr. Walter W. Crim  
Unocal Corporation  
1201 West 5th Street  
P.O. Box 7600  
Los Angeles, California 90051

## 4. Article Number

P 611 587 069

## Type of Service:

- ☐ Registered ☐ Insured  
☒ Certified Mail ☐ COD  
☒ Express Mail

Always obtain signature of addressee or  
agent and DATE DELIVERED.

## 5. Signature — Addressee

X *Walter W. Crim*

## 6. Signature — Agent

X

## 7. Date of Delivery

JUN 18 1987

8. Addressee's Address (ONLY if  
requested and fee paid)

PS Form 3811, Feb. 1986

DOMESTIC RETURN RECEIPT



JUL 23 1987

5HE-12

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Mr. Walter W. Crim  
Unocal Corporation  
1201 West 5th Street  
P.O. Box 7600  
Los Angeles, California 90051

Re: Consent Agreement and Final  
Order  
Union Oil Company of California  
Docket No. V-W-87-R-015

Dear Mr. Crim:

I have enclosed herewith the second draft Consent Agreement and Final Order (CAFO). Please review the CAFO and if acceptable have the two originals signed by the appropriate party or parties within two weeks of your receipt of this letter and return them to me. The United States Environmental Protection Agency will then sign both documents and return one to you.

Sincerely,

Mary Hay  
Assistant Regional Counsel

Enclosures

cc: w/enclosures  
D. W. Bruckert, Supervisor  
UNOCAL Corporation  
bcc: w/enclosures  
J. Cooper, RES  
Mary Hay, ORC

5HE-12:JCooper:nd:6-4464:7/21/87



P 256 147 026

**RECEIPT FOR CERTIFIED MAIL**

NO INSURANCE COVERAGE PROVIDED  
NOT FOR INTERNATIONAL MAIL

(See Reverse)

★ U.S.G.P.O. 1985-480-794

PS Form 3800, June 1985

Sent to Mr. Walter W. Crim	
Unocal Corporation	
Street and No. 1201 West 5th Street	
City, State and Zip Code Los Angeles, California 90051	
Postage	\$ 56
Certified Fee	75
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	20
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$ 2.01
Postmark, or Date	

J. Cooper (5HE-12) USEPA, 230 S. Deaborn, Chgo, IL. 60

**STICK POSTAGE STAMPS TO ARTICLE TO COVER FIRST CLASS POSTAGE,  
CERTIFIED MAIL FEE, AND CHARGES FOR ANY SELECTED OPTIONAL SERVICES. (see front)**

1. If you want this receipt postmarked, stick the gummed stub to the right of the return address leaving the receipt attached and present the article at a post office service window or hand it to your rural carrier. (no extra charge)
2. If you do not want this receipt postmarked, stick the gummed stub to the right of the return address of the article, date, detach and retain the receipt, and mail the article.
3. If you want a return receipt, write the certified mail number and your name and address on a return receipt card, Form 3811, and attach it to the front of the article by means of the gummed ends if space permits. Otherwise, affix to back of article. Endorse front of article **RETURN RECEIPT REQUESTED** adjacent to the number.
4. If you want delivery restricted to the addressee, or to an authorized agent of the addressee, endorse **RESTRICTED DELIVERY** on the front of the article.
5. Enter fees for the services requested in the appropriate spaces on the front of this receipt. If return receipt is requested, check the applicable blocks in item 1 of Form 3811.
6. Save this receipt and present it if you make inquiry.



12 JUN 1987

5HE-12

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Mr. Walter W. Crim  
Unocal Corporation  
1201 West 5th Street  
P.O. Box 7600  
Los Angeles, California 90051

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Mary Hay  
Assistant Regional Counsel

Enclosures

cc: Mr. D.W. Bruckert, Supervisor  
Environmental Services  
UNOCAL Corporation  
Chicago Refinery  
Lemont, Illinois 60439

bcc: J. Cooper, RES  
Mary Hay, ORC

5HE-12:JCooper:nd:6-4464:6/12/87

DATE

6/12/87

AUTHOR

OTHER  
STAFF

UNIT  
CHIEF

5/7

6/1





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

230 SOUTH DEARBORN ST.

CHICAGO, ILLINOIS 60604

10 9 JUN 1987

REPLY TO THE ATTENTION OF:

5CS-16

The Honorable Marvin E. Jones  
Office of Administrative Law Judge  
U.S. EPA  
726 Minnesota Avenue  
Kansas City, Kansas 66101

Re: Union Oil Company of California  
RCRA-V-W-87-R-015

Dear Judge Jones:

As you requested, this letter is to confirm our telephone conference call on Friday, June 5, 1987.

Based upon the close and continuing contacts and negotiations between U.S. EPA and Respondent, both parties sought to provide you with a status report and to request an extension of the schedule you set forth in your Order of April 15, 1987. The parties explained a Consent Agreement and Final Order was currently being drafted in anticipation of a completed groundwater program plan. Once this plan is accepted, a schedule of performance will be established.

As a result of our conversation it was agreed that:

- the date set for filing the prehearing exchange would be extended to August 15, 1987;
- with status reports due on June 20th and July 20th, 1987.

Your understanding and guidance in this matter is appreciated.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Mary E. Hay", is written over the typed name.

Mary E. Hay  
Assistant Regional Counsel

cc: Walter M. Crim, Esq.  
Beverly Shorty, Regional Hearing Clerk

CERTIFICATE OF SERVICE

This is to certify that the original of the foregoing correspondence was delivered to the Regional Hearing Clerk and copies to Marvin E. Jones, Administrative Law Judge and Walter M. Crim, Counsel for Respondent.

---

Mary E. Hay  
Assistant Regional Counsel

Marvin E. Jones  
Office of Administrative Law Judge  
U.S. EPA  
726 Minnesota Avenue  
Kansas City, Kansas 66101

Walter M. Crim, Esq.  
UNOCAL Corporation  
1201 1/2 West 5th Street  
Post Office Box 7600  
Los Angeles, California 90051

Beverly Shorty  
Regional Hearing Clerk  
U.S. EPA  
230 South Dearborn Street  
Chicago, Illinois 60604



217/782-6761

Refer to: 097E036604 -- Hill County  
Lemont/Union Oil  
ILD041350567  
Compliance File

April 24, 1987

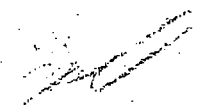
D.H. Bruckert, Supervisor  
Environmental Service  
Unocal Corporation  
Chicago Refinery  
Lemont, Illinois 60439

Dear Mr. Bruckert:

The Agency is in receipt of your April 8, 1987 response(s) to our March 27, 1987 Compliance Inquiry Letter. Your response(s) has been reviewed and the apparent violation(s) of Section(s) 725.194(a)(2)(c) is now considered resolved. Please note, however, the remaining apparent violations cited in the aforementioned Compliance Inquiry Letter are still considered unresolved.

If you have any questions, please contact Cindy Davis at 217/782-6761.

Sincerely,

  
Harry A. Chappel, P.E., Acting Manager  
Facilities Compliance Unit  
Compliance Monitoring Section  
Division of Land Pollution Control

HAC:MT/mls/2221g/59

cc: Division File  
Northern Region  
Paul Jagiello  
Cindy Davis  
Joannine Galsano  
Jonathon Cooper - USEPA ✓  
Michelle Tebrugge



Illinois Environmental Protection Agency · 2200 Churchill Road, Springfield, IL 62706

(217) 782-5544

May 5, 1987

RECEIVED  
MAY 07 1987

U.S. EPA, REGION V  
WASTE MANAGEMENT DIVISION  
OFFICE OF THE DIRECTOR

Mr. Basil G. Constantelos, Director  
Waste Management Division  
U.S. Environmental Protection Agency  
Region V  
230 South Dearborn Street  
Chicago, Illinois 60604

Re: Referral Update  
1978030004 - Will County  
Lemont/Union Oil  
ILD 041550567  
Enforcement File

Dear Mr. Constantelos:

Enclosed you will find a referral update for the Union Oil facility located in Lemont, Illinois. The material enclosed updates the facility's status with regard to the Subpart F (Groundwater Monitoring) regulations.

The Union Oil facility was originally referred to USEPA for enforcement action on August 4, 1986.

On December 17, 1986, USEPA issued a Complaint and Compliance Order to the Union Oil facility.

This referral update sets forth the latest violations cited against the Union Oil facility.

A Compliance Inquiry Letter was sent to Union Oil on March 27, 1987. The violations are specifically set forth in the March 27, 1987 CIL.

Union Oil responded to the CIL in a letter dated April 8, 1987. A copy of that letter is enclosed.

Any questions regarding Union Oil's Subpart F status can be directed to Cindy Davis at 217/782-6760.

If you need further information or have any questions,  
please contact Paul Jagiello at 217/782-5544.

Very truly yours,



Gary P. King  
Senior Attorney  
Enforcement Programs

GPk:rlc  
Enclosures

cc: Bill Muno, USEPA (w/out att.)  
Jonathan Cooper, USEPA (w/out att.)  
Northern Region (Cliff Gould) (w/out att.)  
Cindy Davis (w/out att.)  
Harry Chappel (w/out att.)  
Michelle Tebrugge (w/out att.)  
DLPC Division File (w/out att.)  
Docket Control (Linda Cooper) (w/out att.)  
Paul Jagiello (w/out att.)

# List of Attachments

1. CIL dated March 27, 1987 (4 pgs.)
2. Letter dated April 8, 1987 from D. Bruckert to Harry Chappel (3 pgs.)
3. Letter dated April 24, 1987 from Harry Chappel to D. Bruckert (1 pg.)



217/782-6761

Refer to: 1978030004 -- Will County  
Lemont/Union Oil Company  
ILD041550567  
Compliance File

COMPLIANCE INQUIRY LETTER

Certified #

March 27, 1987

D. W. Bruckert, Supervisor  
Environmental Services  
Unocal Corporation  
Chicago Refinery  
Lemont, Illinois 60439

Dear Mr. Bruckert:

The purpose of this letter is to address the status of the above-referenced facility in relation to the requirements of 35 Ill. Adm. Code, Subpart F and to inquire as to your position with respect to the apparent violations identified in Attachment A and your plans to correct these apparent violations.

The Agency's findings of apparent non-compliance in Attachment A are based on a March 23, 1987 review of documents submitted to the Agency to demonstrate compliance with the requirements of Section 725.175 annual report due March 1, 1987.

Please submit in writing, within fifteen (15) calendar days of the date of this letter, the reasons for the identified violations, a description of the steps which have been taken to correct the violations and a schedule, including dates, by which each violation will be resolved. The written response, and two copies of all documents submitted in reply to this letter, should be sent to the following:

Harry A. Chappel, P.E., Acting Manager  
Facilities Compliance Unit  
Compliance Monitoring Section --  
Illinois Environmental Protection Agency  
Division of Land Pollution Control  
2200 Churchill Road  
Post Office Box 19276  
Springfield, Illinois 62794-9276





Page 2

The statistics performed in June and December of 1986 should not have included the October 1982 background data. Union Oil has requested and IEPA has granted on two separate occasions to exclude the October 1982 analysis from the background data.

Further, take notice that because some or all of the apparent violations cited constitute high priority violations (HPVs), in accordance with the USEPA Enforcement Response Policy this matter is being referred to USEPA Region 5 or the Illinois Attorney General's Office to seek assessment of a penalty pursuant to either the Illinois Environmental Protection Act, Ill. Rev. Stat., Ch. 111 1/2, Sec. 1001 et seq. or the federal Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Sec. 6901 et seq.

If you have any questions regarding the above, please contact Cindy S. Davis at 217/782-6761.

Sincerely,

Harry A. Chappel, P.E., Acting Manager  
Facilities Compliance Unit  
Compliance Monitoring Section  
Division of Land Pollution Control

HAC:MT:jd/1989g/90-91

cc: Division File  
Northern Region  
Paul Jagiello  
Jeannine Balsamo  
USEPA Region V - Jonathan Cooper  
Cindy Davis ✓  
Michelle Tebrugge



Attachment A

1. Pursuant to 35 Ill. Adm. Code 725.193(c),

- A. If the comparisons for the upgradient wells made under paragraph (b) show a significant increase (or pH decrease) the owner or operator must submit this information in accordance with Section 725.194(a)(2)(B).
- B. If the comparisons for downgradient wells made under paragraph (b) show a significant increase (or pH decrease) the owner or operator must then immediately obtain additional groundwater samples for those downgradient wells where a significant difference was detected, split the samples in two and obtain analyses of all additional samples to determine whether the significant difference was a result of laboratory error.

You are in apparent violation of 35 Ill. Adm. Code 725.193(c) for the following reason(s): Failure to do an immediate resample for those downgradient wells where a significant difference was detected.

2. Pursuant to 35 Ill. Adm. Code 725.193(d)(1), if the analyses performed under paragraph (c)(2) confirm the significant increase (or pH decrease) the owner or operator must provide written notice to the Director -- within seven days of the date of such confirmation -- that the facility may be affecting groundwater quality.

You are in apparent violation of 35 Ill. Adm. Code 725.193(d)(1) for the following reason(s): Failure to provide written notice to the Director within 7 days that the facility may be affecting groundwater.

3. Pursuant to 35 Ill. Adm. Code 725.193(d)(2), within 15 days after the notification under paragraph (d)(1), the owner or operator must develop and submit to the Director a specific plan, based on the outline required under paragraph (a) and certified by a qualified geologist or geotechnical engineer for a groundwater quality assessment program at the facility.

You are in apparent violation of 35 Ill. Adm. Code 725.193(d)(2) for the following reason(s): Failure to submit a groundwater assessment plan within 15 days after notification to the Director.

4. Pursuant to 35 Ill. Adm. Code 725.194(a)(2), unless the groundwater is monitored to satisfy the requirements of Section 725.193(d)(4), the owner or operator must report the following groundwater monitoring information to the Director:

- A. During the first year when initial background concentrations are being established for the facility: concentrations or values of the parameters listed in Section 725.192(b)(1) for each groundwater monitoring well within 15 days after completing each quarterly analysis. The owner or operator must separately identify for each monitoring well any parameters whose concentration or value has been found to exceed the maximum contaminant levels listed in Appendix III.



Page 2

- B. Annually: concentrations or values of the parameters listed in Section 725.192(b)(3) for each groundwater monitoring well, along with the required evaluations for these parameters under Section 725.193(b). The owner or operator must separately identify any significant differences from initial background found in the upgradient wells, in accordance with Section 725.193(c)(1). During the active life of the facility, this information must be submitted as part of the annual report required under Section 725.175.
- C. As part of the annual report required under Section 725.175: results of the evaluation of groundwater surface elevations under Section 725.193(f) and a description of the response to the evaluation, where applicable.

You are in apparent violation of 35 Ill. Adm. Code 725.194(a)(2) for the following reason(s): Failure to do the evaluation under 725.193(f) to determine whether the requirements under 725.191(a) for locating the monitoring wells continues to be satisfied.

HAC:MT:jd/1989g/92-93

RECEIVED

APR 13 1987

IEPA-DLPC

*Michelle CINDY*  
*REGIONAL*

Unocal Refining & Marketing Division  
Unocal Corporation  
Chicago Refinery  
Lemont, Illinois 60439  
Telephone (312) 257-7761

ENV 80-87

RESPONSE TO 3-27-87 CIL

Refer to: 1978030004 - Will County  
Lemont Union Oil Company  
ILD 041550567  
Compliance File

**UNOCAL** 76

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED  
#P 330 175 917

John K. Bassett  
Manager, Chicago Refinery

April 8, 1987

Mr. Harry A. Chappel  
Illinois Environmental Protection  
Agency  
Division of Land Pollution  
Control  
Facilities Compliance Unit  
Compliance Monitoring Section  
2200 Churchill Road  
Post Office Box 19276  
Springfield, IL 62794-9276

Dear Sir:

Compliance Inquiry  
Letter Response

Regarding your compliance inquiry letter dated March 27, 1987, received on April 2, 1987, we are responding to the comments in the letter and to each alleged violation as shown in Attachment A. Preparation of this response has been difficult because of the absence of substantive information in the citation section. We feel that more information should be provided which specifies exactly with which part of the regulation IEPA believes we are not in compliance.

In response to the first paragraph on page 2 of IEPA's cover letter, in the future, Unocal will substitute the November 15, 1983 data for the October 20, 1982 data. We regret this oversight. The statistical results for the 1986 data will be rerun. Data will be submitted to IEPA as it becomes available.

In response to Attachment A, point 1 - pursuant to 35 Ill. Adm. Code 725.193(c), failure to do an immediate resample for those downgradient wells where a significant difference was detected, we provide the following. The first round of wells were sampled

in June, 1986. We began to receive test results sporadically in late July to mid August. It was noticed that some of the TOX sample results were abnormally high and showed extremely poor reproducibility. Because the TOX results were abnormally high and showed extremely poor reproducibility, we requested our analytical testing contractor (ETC) to perform a quality control check on the retained samples for a possible explanation. In September, ETC notified Unocal that resampling should be performed for the wells showing abnormal TOX results because the retained samples were too old to run a proper quality control check. The wells were resampled in early October. The test results were received by us in early November, 1986. We requested a statistical analysis by ETC at this time; however, unknown to Unocal, the order was not processed by ETC through their data services section. After failing to receive the original statistical analysis in early December, 1986, we reordered the statistical analysis from ETC in late December, 1986. In early January, 1987, we received the statistical analysis from ETC. However, this analysis did not contain combined upgradient wells against the downgradient well as required. Each individual well was run against the others. Upon receiving the incorrect analysis, we requested a combined analysis. In early February, 1987, we received the correct statistical analysis package.

While the above was happening, it became necessary to begin the second round of semi-annual samples. This was scheduled with Gulf Coast Labs for the first week of December, 1986. Some of the samples were discovered to be inadvertently frozen when received by ETC. Thus necessitating another round of sampling during the fourth week of December, 1986 to complete the schedule. Analytical data was reviewed in January, 1987, and the statistical analysis was then ordered. This statistical data arrived during the month of February, 1987. For those wells which showed significant deviation from background, we scheduled Gulf Coast Labs to resample those wells during the fourth week of March, 1987 which was the first open week for the contractor. We believe we have complied with Section 725.193(c) dealing with timely resampling. Considering contractor availability, we have scheduled resampling as soon as possible as stated above.

Regarding Attachment A, point 2 - pursuant to 35 Ill. Adm. Code 725.193(d)(1), if the analysis confirms significant increase (or pH decrease), IEPA indicates we must provide written notification to the Director within 7 days that our facility may be affecting groundwater quality. The retesting of the wells for the first set and the second test results were available for review about the same time. The first set of statistical results showed positives for the student t-test for some parameters. The second


April 8, 1987

set of statistical results showed positives for different parameters on other wells. Since the first set of results were false positives, no notification was required. The tests and statistical results are not available from the second set of retests at this time. Should the retests confirm results from the December, 1986 sampling, notification of the Director will be made in a timely manner pursuant to 35 Ill. Adm. Code 725.193(d)(1).

Regarding Attachment A, point 3 - pursuant to 35 Ill. Adm. Code 725.193(d)(2), IEPA indicates we failed to submit a groundwater assessment plan within 15 days to the Director. See our response to Point 2 above. Since the statistical results were false positives, the submission of an assessment plan is not required. Should the second round, retest results confirm that the positives were not false, we will submit an assessment plan in a timely manner pursuant to 35 Ill. Adm. Code 725.193(d)(2).

Regarding Attachment A, point 4 (shown as the second point 3, probably in error), IEPA indicates we failed to do an evaluation under 725.193(f) to determine whether the requirements under 725.191(a) for locating the monitoring wells continues to be satisfied. At one time data indicated that wells #1, #2 and #9 are upgradient wells with all others being downgradient. The 1986 data is not as clear, #2 is upgradient with #1 and #9 sometimes upgradient. This matter is presently being handled by U.S. EPA via the draft consent order. Since the location and number of downgradient wells will be an outcome of the draft consent order, we suggest that IEPA work with U.S. EPA and Unocal on this determination.

Very truly yours,



D. W. Bruckert, Supervisor  
Environmental Services

LDE/rm

cc: Jonathan Cooper, USEPA

RECEIVED

APR 13 1987

EPA-DLPC





Illinois Environmental Protection Agency

2200 Churchill Road, Springfield, IL 62706

217/782-6761

Refer to: 0978030004 -- Will County  
Lenont/Union Oil  
IL0041560567  
Compliance File

April 24, 1987

D.W. Bruckert, Supervisor  
Environmental Service  
Unocal Corporation  
Chicago Refinery  
Lenont, Illinois 60439

Dear Mr. Bruckert:

The Agency is in receipt of your April 8, 1987 response(s) to our March 27, 1987 Compliance Inquiry Letter. Your response(s) has been reviewed and the apparent violation(s) of Section(s) 725.194(a)(2)(c) is now considered resolved. Please note, however, the remaining apparent violations cited in the aforementioned Compliance Inquiry Letter are still considered unresolved.

If you have any questions, please contact Cindy Davis at 217/782-6761.

Sincerely,

*Harry A. Chappel*  
Harry A. Chappel, P.E., Acting Manager  
Facilities Compliance Unit  
Compliance Monitoring Section  
Division of Land Pollution Control

HAC:RT/bls/2221g/99

cc: Division File  
Northern Region  
Paul Jagiello  
Cindy Davis  
Jeannine Balsano  
Jonathon Cooper - USEPA  
Michelle Tebrugge

RECEIVED  
ENFORCEMENT PROGRAMS

APR 28 1987

Environmental Protection Agency

**UNOCAL** 76

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED  
#P 330 175 917

April 8, 1987

John K. Bassett  
Manager, Chicago Refinery

RECEIVED  
APR 13 1987  
U.S. EPA, REGION V  
WASTE MANAGEMENT DIVISION  
HAZARDOUS WASTE ENFORCEMENT BRANCH

Mr. Harry A. Chappel  
Illinois Environmental Protection  
Agency  
Division of Land Pollution  
Control  
Facilities Compliance Unit  
Compliance Monitoring Section  
2200 Churchill Road  
Post Office Box 19276  
Springfield, IL 62794-9276

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Letter Response

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In response to the first paragraph on page 2 of IEPA's cover letter, in the future, Unocal will substitute the November 15, 1983 data for the October 20, 1982 data. We regret this oversight. The statistical results for the 1986 data will be rerun. Data will be submitted to IEPA as it becomes available.

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April 8, 1987

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Regarding Attachment A, point 2 - pursuant to 35 Ill. Adm. Code 725.193(d)(1), if the analysis confirms significant increase (or pH decrease), IEPA indicates we must provide written notification to the Director within 7 days that our facility may be affecting groundwater quality. The retesting of the wells for the first set and the second test results were available for review about the same time. The first set of statistical results showed positives for the student t-test for some parameters. The second

not for  
June 1986


April 8, 1987

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Very truly yours,



D. W. Bruckert, Supervisor  
Environmental Services

LDE/rm

cc: Jonathan Cooper, USEPA



MAR 31 1987

Union Oil Settlement Conference  
March 3, 1987

Jonathan Cooper, Hydrologist  
IL/IN Unit

Compliance File  
ILD 041 550 567

A meeting was held with Union Oil on March 3, 1987, in Chicago to discuss and attempt to reach agreement regarding issues raised by and violations cited in Complaint V-W-87 R-015. A list of those in attendance is attached.

Major issues addressed were:

- (1) The limit of the waste management areas - in regard to present and future well locations;
- (2) Ground water flow direction(s) - previously submitted piezometric surface maps indicate various ground water flow patterns (e.g., NW, radial, NE) - additional piezometers are necessary to accurately define flow;
- (3) Inadequacy of existing data from bore logs and generalized cross sections and regarding the degree of hydraulic interconnectedness of lithologic units within the uppermost aquifer, site-specific hydraulic properties of lithologic units, and potentiometric head data of the dolomite bedrock versus the sand and till units -- all these data deficiencies combine to complicate/make impossible specification of exact modifications required to Union Oil's existing g.w.m. system to achieve compliance with 35 Ill. Adm. Code Part 725, Subpart F; and
- (4) The acceptability of existing wells for incorporation into a revised/new system of g.w.m. wells.

Union Oil agreed to submit a plan for further subsurface investigation -- essentially addressing Item A of the Compliance Order portion of the Complaint (page 7). This will address problems stated in items 2 and 3 above.

Areas for further discussion or where disagreements remain:

- (1) Limit of the waste management area (w.m.a.):  
Union Oil has circumscribed all the land treatment areas by including them all in a square plot outlined in their Part B on map A-2. Mr. Gates, the consultant, stated that runoff from land treatment activity produces a "swampy area" which acts to



recharge the aquifer in the NW area of the square plot. He said that part of the logic behind locating wells (MW5 and MW8) there was to detect contamination of g.w. more quickly than if placed at the limit of the w.m.a. as U.S. EPA requires by regulation. [Shallow, non-RCRA wells also monitor shallow zones under an IEPA agreement with Union Oil in the NW corner.]

(2) Adequacy of existing wells for incorporation into an updated g.w.m. system:

- IEPA and U.S. EPA could not promise any wells would be definitely included in the new system;
- the Agencies agree to rule on the individual merits of each well following receipt of new information from additional subsurface investigation and proposed new well location; and
- for reasons stated in the Order, both Agencies have problems with existing wells

(3) Penalty: The U.S. EPA penalty policy was sent by mail to the attorney. Mr. Gates raised the issue of possibly getting U.S. EPA to reduce the penalty amount by 20% maximum. Penalty calculations were given to Mr. Crim, but no agreement was reached on an amount to be paid. (Note: Mr. Bruckert asked for, and was sent, a Class I/II classification system for RCRA violations.)

5HE-12:Cooper:lr:3/23/87:#27  
3/30/87

cc:Joe Boyle

INT. DATE	TYPIST	AUTHOR	OTHER STAFF	IL/IN UNIT CHIEF	SECL. SEC.Y		WMD R/R
	LL 3/30/87	JC 3/30/87		JMB			



Jon Cooper

Lee Enchull  
WALT CRIM  
DARRELL BRUCKERT  
TODD GATES  
Cindy S. Davis  
HARRY A. CHAPPEL  
Jonathan P. Cooper  
Mary E. Hay

Unocal, Chicago Refinery 312-257-7761  
UNOCHL, Legal 213-977-7944  
Unocal, CHICAGO Ref. 312-257-7761  
T. M. GATES, INC. 513-248-1021  
IEPA - Compliance 217-782-6761  
" " 782-6762  
U.S. EPA 312-886-4464  
U.S. EPA 312-886-6827

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION V

DATE: MAR 31 1987

SUBJECT: Union Oil Settlement Conference  
March 3, 1987

FROM: Jonathan Cooper, Hydrologist  
IL/IN Unit

TO: Compliance File  
ILD 041 550 567

RECEIVED

APR 01 1987

SOLID WASTE BRANCH  
U.S. EPA REGION V

A meeting was held with Union Oil on March 3, 1987, in Chicago to discuss and attempt to reach agreement regarding issues raised by and violations cited in Complaint V-W-87 R-015. A list of those in attendance is attached.

Major issues addressed were:

- (1) The limit of the waste management areas - in regard to present and future well locations;
- (2) Ground water flow direction(s) - previously submitted piezometric surface maps indicate various ground water flow patterns (e.g., NW, radial, NE) - additional piezometers are necessary to accurately define flow;
- (3) Inadequacy of existing data from bore logs and generalized cross sections and regarding the degree of hydraulic interconnectedness of lithologic units within the uppermost aquifer, site-specific hydraulic properties of lithologic units, and potentiometric head data of the dolomite bedrock versus the sand and till units -- all these data deficiencies combine to complicate/make impossible specification of exact modifications required to Union Oil's existing g.w.m. system to achieve compliance with 35 Ill. Adm. Code Part 725, Subpart F; and
- (4) The acceptability of existing wells for incorporation into a revised/new system of g.w.m. wells.

Union Oil agreed to submit a plan for further subsurface investigation -- essentially addressing Item A of the Compliance Order portion of the Complaint (page 7). This will address problems stated in items 2 and 3 above.

Areas for further discussion or where disagreements remain:

- (1) Limit of the waste management area (w.m.a.):  
Union Oil has circumscribed all the land treatment areas by including them all in a square plot outlined in their Part B on map A-2. Mr. Gates, the consultant, stated that runoff from land treatment activity produces a "swampy area" which acts to

recharge the aquifer in the NW area of the square plot. He said that part of the logic behind locating wells (MW5 and MW8) there was to detect contamination of g.w. more quickly than if placed at the limit of the w.m.a. as U.S. EPA requires by regulation. [Shallow, non-RCRA wells also monitor shallow zones under an IEPA agreement with Union Oil in the NW corner.]

- (2) Adequacy of existing wells for incorporation into an updated g.w.m. system:
  - IEPA and U.S. EPA could not promise any wells would be definitely included in the new system;
  - the Agencies agree to rule on the individual merits of each well following receipt of new information from additional subsurface investigation and proposed new well location; and
  - for reasons stated in the Order, both Agencies have problems with existing wells
- (3) Penalty: The U.S. EPA penalty policy was sent by mail to the attorney. Mr. Gates raised the issue of possibly getting U.S. EPA to reduce the penalty amount by 20% maximum. Penalty calculations were given to Mr. Crim, but no agreement was reached on an amount to be paid. (Note: Mr. Bruckert asked for, and was sent, a Class I/II classification system for RCRA violations.)

Jon Cooper

Lee Erchull

WALT CRIM

DARRELL BRUCKERT

TODD GATES

Cindy S. Davis

HARRY A. CHAPPEL

Jonathan P. Cooper

Mary E. Hay

Unocal, Chicago Refinery

UNOCAL, Legal

UNOCAL, CHICAGO REF.

T. M. GATES, INC.

EPA - Compliance

"

U.S. EPA

U.S. EPA

312-257-7761

213-977-7944

312-257-7761

513-248-1025

217-782-6761

782-6762

312-886-4464

312-886-6827



217/792-6761

Refer to: 1978030004 -- Will County  
Lemont/Union Oil Company  
IL0041550567  
Compliance File

COMPLIANCE INQUIRY LETTER

Certified # P245 152 257

March 27, 1987

D. W. Bruckert, Supervisor  
Environmental Services  
Unocal Corporation  
Chicago Refinery  
Lemont, Illinois 60439

Dear Mr. Bruckert:

The purpose of this letter is to address the status of the above-referenced facility in relation to the requirements of 35 Ill. Adm. Code, Subpart F and to inquire as to your position with respect to the apparent violations identified in Attachment A and your plans to correct these apparent violations.

The Agency's findings of apparent non-compliance in Attachment A are based on a March 23, 1987 review of documents submitted to the Agency to demonstrate compliance with the requirements of Section 725.176 annual report due March 1, 1987.

Please submit in writing, within fifteen (15) calendar days of the date of this letter, the reasons for the identified violations, a description of the steps which have been taken to correct the violations and a schedule, including dates, by which each violation will be resolved. The written response, and two copies of all documents submitted in reply to this letter, should be sent to the following:

Harry A. Chappel, P.E., Acting Manager  
Facilities Compliance Unit  
Compliance Monitoring Section  
Illinois Environmental Protection Agency  
Division of Land Pollution Control  
2200 Churchill Road  
Post Office Box 19276  
Springfield, Illinois 62794-9276






Page 2

The statistics performed in June and December of 1986 should not have included the October 1982 background data. Union Oil has requested and IEPA has granted on two separate occasions to exclude the October 1982 analysis from the background data.

Further, take notice that because some or all of the apparent violations cited constitute high priority violations (HPVs), in accordance with the USEPA Enforcement Response Policy this matter is being referred to USEPA Region 5 or the Illinois Attorney General's Office to seek assessment of a penalty pursuant to either the Illinois Environmental Protection Act, Ill. Rev. Stat., Ch. 117 1/2, Sec. 1001 et seq. or the Federal Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Sec. 6901 et seq.

If you have any questions regarding the above, please contact Cindy S. Davis at 217/782-6761.

Sincerely,

  
Harry A. Chappel, P.E., Acting Manager  
Facilities Compliance Unit  
Compliance Monitoring Section  
Division of Land Pollution Control

HAC:RT:j4/1886g/88-91

cc: Division File  
Northern Region  
Paul Jagiello  
Joannice Balsam  
USEPA Region V - Jonathan Cooper  
Cindy Davis  
Michelle Tebrugge





## Attachment A

## 1. Pursuant to 35 Ill. Adm. Code 725.193(c),

- A. If the comparisons for the upgradient wells made under paragraph (b) show a significant increase (or pH decrease) the owner or operator must submit this information in accordance with Section 725.194(a)(2)(B).
- B. If the comparisons for downgradient wells made under paragraph (b) show a significant increase (or pH decrease) the owner or operator must then immediately obtain additional groundwater samples for those downgradient wells where a significant difference was detected, split the samples in two and obtain analyses of all additional samples to determine whether the significant difference was a result of laboratory error.

You are in apparent violation of 35 Ill. Adm. Code 725.193(c) for the following reason(s): Failure to do an immediate resample for those downgradient wells where a significant difference was detected.

2. Pursuant to 35 Ill. Adm. Code 725.193(d)(1), if the analyses performed under paragraph (c)(2) confirm the significant increase (or pH decrease) the owner or operator must provide written notice to the Director -- within seven days of the date of such confirmation -- that the facility may be affecting groundwater quality.

You are in apparent violation of 35 Ill. Adm. Code 725.193(d)(1) for the following reason(s): Failure to provide written notice to the Director within 7 days that the facility may be affecting groundwater.

3. Pursuant to 35 Ill. Adm. Code 725.193(d)(2), within 15 days after the notification under paragraph (d)(1), the owner or operator must develop and submit to the Director a specific plan, based on the outline required under paragraph (a) and certified by a qualified geologist or geotechnical engineer for a groundwater quality assessment program at the facility.

You are in apparent violation of 35 Ill. Adm. Code 725.193(d)(2) for the following reason(s): Failure to submit a groundwater assessment plan within 15 days after notification to the Director.

3. Pursuant to 35 Ill. Adm. Code 725.194(a)(2), unless the groundwater is monitored to satisfy the requirements of Section 725.193(d)(4), the owner or operator must report the following groundwater monitoring information to the Director:

- A. During the first year when initial background concentrations are being established for the facility: concentrations or values of the parameters listed in Section 725.192(b)(1) for each groundwater monitoring well within 15 days after completing each quarterly analysis. The owner or operator must separately identify for each monitoring well any parameters whose concentration or value has been found to exceed the maximum contaminant levels listed in Appendix III.



Page 7

- B. Annually: concentrations or values of the parameters listed in Section 725.197(b)(3) for each groundwater monitoring well, along with the required evaluations for these parameters under Section 725.193(h). The owner or operator must separately identify any significant differences from initial background found in the upgradient wells, in accordance with Section 725.193(c)(1). During the active life of the facility, this information must be submitted as part of the annual report required under Section 725.175.
- C. As part of the annual report required under Section 725.175: results of the evaluation of groundwater surface elevations under Section 725.193(f) and a description of the response to the evaluation, where applicable.

You are in apparent violation of 35 Ill. Adm. Code 725.194(a)(2) for the following reason(s): Failure to do the evaluation under 725.193(f) to determine whether the requirements under 725.191(a) for locating the monitoring wells continues to be satisfied.

WAC:MT:jc/0909/92-93

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION V

IN THE MATTER OF:	)	DOCKET NO. V-W-87R-015
	)	
UNION OIL COMPANY OF CALIFORNIA	)	MOTION FOR EXTENSION OF TIME
135th STREET and NEW AVENUE	)	TO ANSWER COMPLAINT
LEMONT, ILLINOIS 60439	)	
ILD 041 550 567	)	
	)	

The Union Oil Company of California dba Unocal ("UNOCAL"), through its attorneys Sam A. Snyder, Timothy R. Thomas, Brendon M. Dixon and Walter W. Crim, moves for an extension of time to answer the Complaint filed in this matter until February 2, 1987. This short extension is necessary as a result of the Complaint being served on UNOCAL during the Christmas holidays, thereby shortening the actual time UNOCAL has had to complete the Answer. U.S. EPA Region V Technical Staff and Regional Counsel concur in this Motion.

Respectfully submitted,

UNION OIL COMPANY OF CALIFORNIA

By: Walter W. Crim  
WALTER W. CRIM  
Unocal Center  
1201 W. Fifth Street  
P.O. Box 7600  
Los Angeles, CA 90051  
(213) 977-7944

RECEIVED  
JAN 12 1987  
U.S. EPA, REGION V  
WASTE MANAGEMENT DIVISION  
HAZARDOUS WASTE ENFORCEMENT BRANCH

CERTIFICATE OF SERVICE

I hereby certify that I have caused a copy of the foregoing Motion to be served upon the persons designated below, on the date below, by causing said copies to be deposited in the U.S. Mail, First Class and certified-return receipt requested, postage prepaid, at Los Angeles, California, in envelopes addressed to:


Mary Hay  
Assistant Regional Counsel  
U.S. EPA, Region V  
(5C-16)  
230 S. Dearborn Street  
Chicago, Illinois 60604

Johnathan Cooper  
U.S. EPA, Region V  
RCRA Enforcement Section  
(5HE-12)  
230 S. Dearborn Street  
Chicago, Illinois 60604

I have further caused the original of the Motion and this Certificate of Service to be served in the Office of the Regional Hearing Clerk, on the date below, by causing said originals to be deposited in the U.S. Mail, First Class and certified-return receipt requested, postage prepaid, at Los Angeles, California, in envelopes addressed to:

Ms. Beverly Shorty  
Hearing Clerk  
U.S. EPA, Region V  
230 S. Dearborn Street  
Chicago, Illinois 60604

Dated this 7th day of January, 1987.

  
\_\_\_\_\_



5HE-12

DEC 17 1986

P 139.415.633

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

C.T. Corporation System  
Registered Agent for  
Union Oil Company of California  
208 South LaSalle Street  
Chicago, Illinois 60604

V-W- 87 R-015

Re: Complaint, Findings of Violation  
and Compliance Order  
Union Oil, Chicago Refinery  
ILD 041 550 567

Dear Sir/Madam:

Enclosed please find a Complaint and Compliance Order which specifies this Agency's determination of certain violations by Union Oil Company of California of the Resource Conservation and Recovery Act (RCRA), as amended, 42 U.S.C. §6901 et seq. This Agency's determination is based on an inspection on May 16, 1986, of the facility located at 135th Street and New Avenue in Lemont, Illinois by a representative of the Illinois Environmental Protection Agency (IEPA), and other information in our files. The Findings in the Complaint state the reasons for such a determination. In essence, the facility failed to meet particular requirements of RCRA relating to the development and implementation of an acceptable ground-water monitoring program according to regulations stated in 35 Ill. Adm. Code Part 725, Subpart F.

Accompanying the Complaint is a Notice of Opportunity for Hearing. Should you desire to contest the Complaint, a written request for a hearing is required to be filed with Ms. Beverly Shorty, Regional Hearing Clerk (5MF-14), United States Environmental Protection Agency (U.S. EPA), 230 South Dearborn Street, Chicago, Illinois 60604, within 30 days from receipt of this Complaint. A copy of your request should also be sent to Mary Hay, Office of Regional Counsel (5C-16), U.S. EPA at the above address.



**UNITED STATES POSTAL SERVICE**

**OFFICIAL BUSINESS**

**SENDER INSTRUCTIONS**

Print your name, address, and ZIP Code in the space below.

- Complete items 1, 2, 3, and 4 on the reverse.
- Attach to front of article if space permits, otherwise affix to back of article.
- Endorse article "Return Receipt Requested" adjacent to number.



5HE-12

PENALTY FOR PRIVATE  
USE, \$300

**RETURN  
TO**



RCRA J. COOPER

(Name of Sender)

UNITED STATES OF AMERICA  
ENVIRONMENTAL PROTECTION AGENCY  
REGION V  
230 SOUTH DEARBORN STREET  
CHICAGO, IL 60604





**SENDER: Complete items 1, 2, 3 and 4.**

Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.

1. ☐ Show to whom, date and address of delivery.  
 2. ☐ Restricted Delivery.

**3. Article Addressed to:**

D.W. BRUCKERT, UNION OIL CO.  
 Chicago Refinery  
 135th ST. and New Ave.  
 Lemont, IL 60439

**4. Type of Service:**

- ☐ Registered      ☐ Insured  
☐ Certified      ☐ COD  
☐ Express Mail

**Article Number**

P 139 415 634

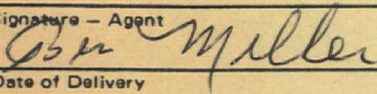
Always obtain signature of addressee or agent and  
**DATE DELIVERED.**

**5. Signature — Addressee**

X

**6. Signature — Agent**

X


**7. Date of Delivery****8. Addressee's Address (ONLY if requested and fee paid)**



Regardless of whether you choose to request a hearing within the prescribed time limit following service of this Complaint, you are extended an opportunity to request an informal settlement conference.

If you have any questions or desire to request an informal conference for the purpose of settlement with Waste Management Division staff, please contact Jonathan Cooper, United States Environmental Protection Agency, RCRA Enforcement Section (5HE-12), 230 South Dearborn Street, Chicago, Illinois 60604. His phone number is (312) 886-4464.

Sincerely,

Basil G. Constantelos, Director  
Waste Management Division

Enclosure *CFR* ✓

cc: Gary King, IEPA ✓  
Harry Chappel, IEPA ✓  
Glenn Savage, IEPA ✓

D. W. Bruckert  
Union Oil Company  
Chicago Refinery  
Lemont, Illinois 60439

*139.415-634*

bcc: Robert Small, OWPE (WH-527) ✓  
Mary Hay, ORC 5C-16 ✓  
Denise Reape, 5HE-12 ✓  
Regional Hearing Clerk, 5MF-14 ✓  
IL Permit Unit, 5HS-13 ✓

✓  
5HE-12:J.Cooper:nd:6-4464:11/28/86

12/11							
TITLE	AUTHOR	OTHER STAFF	UNIT CHIEF	SECT. CHIEF	SECT. CHIEF	HWCB CHIEF	WMD DIR
n/c. 11/28/86	JC. 12/01/86		JMB 12/1/86	AP 12/2/86	WEY 12/2/86	WCB 12/3/86	12/1/86

*file into Part A file*



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**REGION 5**

**230 SOUTH DEARBORN ST.**

**CHICAGO, ILLINOIS 60604**

REPLY TO THE ATTENTION OF:

5HE-12

**17 OCT 1986**

W. Child, Acting Manager  
Division of Land Pollution Control  
Illinois Environmental Protection Agency  
2200 Churchill Road  
Springfield, Illinois 62706

Re: RCRA 3008(a)(2) Notice  
Union Oil Company,  
Chicago Refinery  
ILD 041 550 567

Dear Mr. Child:

We have reviewed your August 4, 1986, hazardous waste enforcement referral package for Union Oil Company. Pursuant to Section 3008(a)(2) of the Resource Conservation and Recovery Act (RCRA), as amended, I am providing notice to you that the United States Environmental Protection Agency is preparing to issue an order under Section 3008(a)(1) for violations of RCRA, including violations outlined in the referral.

If you have any questions on this matter, please contact Mr. Jonathan Cooper of my staff at (312) 886-4464.

Sincerely,

William H. Miner, Chief  
Hazardous Waste Enforcement Branch



5HE-12

17 OCT 1986

W. Child, Acting Manager  
Division of Land Pollution Control  
Illinois Environmental Protection Agency  
2200 Churchill Road  
Springfield, Illinois 62706

Re: RCRA 3008(a)(2) Notice  
Union Oil Company,  
Chicago Refinery  
ILD 041 550 567

Dear Mr. Child:

We have reviewed your August 4, 1986, hazardous waste enforcement referral package for Union Oil Company. Pursuant to Section 3008(a)(2) of the Resource Conservation and Recovery Act (RCRA), as amended, I am providing notice to you that the United States Environmental Protection Agency is preparing to issue an order under Section 3008(a)(1) for violations of RCRA, including violations outlined in the referral.

If you have any questions on this matter, please contact Mr. Jonathan Cooper of my staff at (312) 886-4464.

Sincerely,

William H. Miner, Chief  
Hazardous Waste Enforcement Branch

bcc: M. Murphy, SWB  
J. Mayka, SWB

5HE-12:Jc:nd:886-4464:10-15-86

INIT. DATE	TYPIST	AUTHOR	OTHER STAFF	UNIT CHIEF	SECT. CHIEF	SECT. CHIEF	HWEB CHIEF	WMD DIR
	hlc	gc		JMB	ap	WFM	[Signature]	
	10/15/86	10/15/86		10/15/86	10/15/86	10/15/86	10/16/86	

*Amc 10/16*

*[Signature]*



SEP 17 1986

Evaluation of Adequacy of  
Subpart F System with regard  
to minimum requirements

Jonathan Cooper  
Hydrologist

Union Oil File  
ILD 041 550 567

At the time a CIL was issued to Union Oil (8/5/85), the facility was in assessment monitoring. Findings of non-compliance were listed as follows:

- (1) Attachment A: Violations based on CME of 6/24/85
  - a) Several wells needed repair/replacement of concrete surface seals
  - b) Discrepancy of 21.22 ft. in total well depth of SW-7
- (2) Attachment B: Violations based on 7/1/85 review of documents submitted to IEPA to demonstrate compliance with the requirements of Section 725.193.

All of these violations were to be addressed while Union Oil was in assessment monitoring. Attachment C in the CIL listed several apparent violations which had to be addressed within 30 days of Union Oil returning to detection monitoring under 725.193(d)(6). Inadequacies of the well system listed in Attachment C include:

- (1) Need for additional up- and downgradient wells for immediate detection of releases (some nested)
- (2) Excessive distance between wells (400 - 600 feet apart)
- (3) Screened lengths that are too long (20 feet)
- (4) Excessive sand packs (40 ft.) and apparent use of natural clay for backfill of annular space.

Violations listed in Attachments A and B have been appropriately addressed as noted in IEPA correspondence to the facility dated 1/10/86 and 4/2/86.

Union Oil has returned to detection monitoring (about 4/86) and therefore violations listed in Attachment C of the 8/5/85 CIL now are applicable and must be addressed. A CME was done May 16, 1986. A PECL is being/was sent to Union Oil listing violations noted in Attachment C and a PEC will be arranged for the final week of June with facility officials.



Current Status of Subpart F System:

- (1) Upgradient wells - MW-1, MW-2, MW-9
- (2) Downgradient wells - MW-4, MW-5, MW-7, MW-8
- (3) MW-3, MW-6 - used for ground-water flow direction

Minimum requirements, in terms of numbers of wells upgradient and downgradient, appear to be satisfied. However, the numbers, depths and construction of wells need re-evaluation and IEPA has found the current Subpart F program to be inadequate. Need:

- (1) additional wells to characterize background
- (2) to monitor "entire" uppermost aquifer (may need nested wells)
- (3) to reduce spacing between downgradient wells
- (4) shorter well screens and sand packs
- (5) proper sealing of annular space above screened intervals in wells.

However: As of November 8, 1985, items listed in Attachment C (8/5/85) were not officially stated as being violations by IEPA because Union Oil was in Assessment monitoring and therefore not under detection monitoring requirements and could officially certify.

5HE-12:Cooper:1r:6/4464

				12/12				
INIT. DATE	JK 9/16/86	JC 9/16/86		JMB 9/16/86				





Illinois Environmental Protection Agency · 2200 Churchill Road, Springfield, IL 62706

217/782-6761

Refer to: 1978030004 -- Will County  
Lemont/Union Oil  
ILD041550567  
Compliance File

D.W. BRICKERT

AUG 18 1986

L. D. ERCHULL

AUG 11 1986

August 5, 1986

Mr. Leo Erchull  
Union Oil Company  
Chicago Refinery  
Lemont, Illinois 60439

Dear Mr. Erchull:

Per your conversation with Michelle Tebrugge, the Pre-Enforcement Conference with Union Oil has been rescheduled for August 28, 1986 at 10:00 A.M. at the Division of Land Pollution Control, 2200 Churchill Road, Springfield, Illinois 62706.

If you have any questions, please contact Michelle D. Tebrugge at 217/782-4462.

Sincerely,

Mark A. Haney, Manager  
Facilities Compliance Unit  
Compliance Monitoring Section  
Division of Land Pollution Control

MAH:MDT:jp:2/33

cc: Division File  
Northern Region  
D.W. Bruckert  
Don Gimbel  
Paul Jagiello  
Cindy Davis  
Larry Eastep  
Rob Watson  
Ken Bechely  
Jeannine Balsamo  
Michelle Tebrugge



217/782-6761

Refer to: 1976030004 -- Will County  
Union Oil Company  
IL0041550567  
Compliance File

PRE-ENFORCEMENT CONFERENCE LETTER

Certified by P. J. [illegible] 6/12

June 25, 1986

Mr. Leo Erchull  
Union Oil Company - Chicago Refinery  
Lemont, Illinois 60439

Dear Mr. Erchull:

By copy of this letter, the Agency hereby informs Union Oil Company of apparent violations of the Illinois Environmental Protection Act and/or rules and regulations adopted thereunder. These apparent violations are set forth in Attachment A of this letter. In addition, listed in Attachment B are discrepancies discovered during the May 15, 1986 inspection. For your information enclosed is a copy of the inspection report.

As a result of these apparent violations, it is our intent to refer this matter to the Agency's legal staff for the preparation of a formal enforcement case. The Agency's legal staff will, in turn, refer this matter to the Office of Attorney General or to the United States Environmental Protection Agency for the filing of a formal complaint.

Prior to taking such action, however, you are requested to attend a Pre-Enforcement Conference to be held at the Division of Land Pollution Control, 2200 Churchill Road, Springfield, Illinois 62706. The purpose of this Conference will be:

1. To discuss the validity of the apparent violations noted by Agency staff, and
2. To arrive at a program to eliminate existing and/or future violations.

You should, therefore, bring such personnel and records to the conference as will enable a complete discussion of the above items. We have scheduled the Conference for July 17, 1986, at 10:00 a.m. If this arrangement is inconvenient, please contact Bob Filson at 217/782-6761 to arrange for an alternative date and time.



Page 2

In addition, please be advised that this letter constitutes the notice required by Section 31(d) of the Illinois Environmental Protection Act prior to the filing of a formal complaint. The cited Section of the Illinois Environmental Protection Act requires the Agency to inform you of the charges which are to be alleged and offer you the opportunity to meet with appropriate officials within thirty days of this notice date in an effort to resolve such conflict which could lead to the filing of formal action.

Sincerely,

Michael F. Nechvatal, Manager  
Compliance Monitoring Section  
Division of Land Pollution Control

MFM:BF:jcm/1333F/6-7

Attachment

cc: Division File  
Northern Region  
Paul Jagiello  
Cindy Davis  
Jeannine Balsano  
Rob Watson  
USEPA - Region V  
Bar Filson



## ATTACHMENT A

1. Pursuant to 35 Ill. Adm. Code 725.190(a), the owner or operator of a surface impoundment or land treatment facility must implement a groundwater monitoring program capable of determining the facility's impact on the quality of the groundwater in the uppermost, and all hydraulically connected, aquifers. The number, depths and construction of the current monitoring wells, as discussed below, indicate that the current program is inadequate. Additionally, the following geologic/hydrogeologic information is needed in order to complete an adequate review of the geologic/hydrogeologic system.
  - a. in-situ hydraulic conductivity tests on the screened intervals;
  - b. hydraulic conductivity data on the silty-clay and clayey-silt tills;
  - c. the physical properties of the dolomite (including hydraulic conductivity, porosity, potentiometric data, degree of interconnection with the unconsolidated deposits and lower aquifers, fractured or weathered zones, flow rate and flow direction);
  - d. structural contour map(s) of the dolomite; and
  - e. the effect of the Chicago Sanitary and Ship Canal and the I and M Canal on local groundwater conditions.
2. Pursuant to 35 Ill. Adm. Code 725.190(b), the owner or operator must install a groundwater monitoring system which meets the requirements of Section 725.191. As described below, the number and depth of the monitoring wells are not sufficient to meet the requirements of Section 725.191.
3. Pursuant to 35 Ill. Adm. Code 725.191(a)(1), groundwater monitoring system must consist of an adequate number of upgradient monitoring wells. Upgradient wells must be installed that provide representative background samples for the dolomite aquifer and any hydraulically connected unconsolidated deposits. The construction of these wells should be such that the aquifer and the unconsolidated deposits can be monitored exclusively. This will require well screens of no more than ten feet.
4. Pursuant to 35 Ill. Adm. Code 725.191(a)(2), the groundwater monitoring system must consist of an adequate number of downgradient monitoring wells. The number, depths and locations of the current wells are inadequate to immediately detect any statistically significant amounts of hazardous waste or hazardous waste constituents in the groundwater for the following reasons:
  - a. Downgradient wells are, at a minimum, 500 feet apart. The facility must provide a justification for this well spacing and provide additional wells if necessary.
  - b. Cross sections and boring logs indicate that the present wells monitor as many as four lithologic units.





5. Pursuant to 35 Ill. Adm. Code 725.191(c), all monitoring wells must be screened and sand packed as necessary to allow for the collection of acceptable samples. The annular space above the sampling interval must be sealed with a suitable material, i.e., cement grout or bentonite slurry. The large screened intervals (20 ft.), the excessive sand packs (40 ft.) and the use of natural clay as a backfill material combined make the current monitoring wells unacceptable.



ATTACHMENT 3

1. Discrepancies in total depth were also noted for two of the wells during the inspection. SW7 is 20.41 feet shallower than when originally installed and SW4 is 4.62 feet greater than original borings indicate. Furthermore, the cement surface seal at SW9 must be repaired. These concerns must also be addressed during the Pre-Enforcement Conference.

MFN:BF:jmm/1333F/8-9



217/782-6761

Refer to: 1978030004 -- Will County  
Lemont/Union Oil  
ILD041550567

April 2, 1986

Mr. D. W. Bruckert  
Union Oil Company  
Chicago Refinery  
Lemont, Illinois 60439

Mr. Leo D. Erchull  
Union Oil Company  
Chicago Refinery  
Lemont, Illinois 60439

Gentlemen:

The Agency is in receipt of your March 27, 1986 response to our August 5, 1985 Compliance Inquiry Letter. Your response has been reviewed and resolves the apparent violation(s) of Section(s) 725.191(a)(1).

Comment number 2 of Attachment A appears to be adequately addressed at this time.

This concludes IEPA, Division of Land Pollution Control activity regarding the August 5, 1985 Compliance Inquiry Letter.

If you have any questions, please contact Cindy S. Davis at 217/782-6761.

Sincerely,

Mark A. Haney, Manager  
Facilities Compliance Unit  
Compliance Monitoring Section  
Division of Land Pollution Control

MAH:BF:jd/0678F/30

cc: Division File  
Northern Region  
Jeannine Balsamo  
Rob Watson  
Paul Jagiello  
Bur Filson  
USEPA Region V



Illinois Environmental Protection Agency : 2200 Churchill Road, Springfield, IL 62706

217/782-6761

Refer to: 1978030004 -- Will County  
Lemont/Union Oil  
ILD041550567

May 6, 1986

Mr. D.W. Bruckert  
Union Oil Company  
Chicago Refinery  
Lemont, Illinois 60439

Mr. Leo D. Erchull  
Union Oil Company  
Chicago Refinery  
Lemont, Illinois 60439

Gentlemen:

The Agency has reviewed your Phase II Groundwater Assessment Report dated March 27, 1986. After reviewing the report it has been determined that Union Oil will return to Detection Monitoring.

In Unocal's Phase II Assessment plan, concern was expressed that the student's t-test is inappropriate to evaluate Unocal's groundwater quality data. Interim status regulations require the use of a student's t-test at the 0.01 level of significance. However, due to a recent policy change Unocal now has the option to choose a student's t-test which is found to be most applicable to the data being analyzed. Unocal may perform the student's t-test of their choice, however, the results must be based on only one type of t-test. The t-test of choice must be well documented with explicit examples and technical references.

The Agency concurs that the pH data from the October 20, 1982 sampling are anomalous and should, therefore, be excluded from future statistical analysis.

Data from the November 15, 1983 sampling interval should be used as a substitute for the above mentioned data. This substitution will complete the required background data.

If you have any questions, please contact Cindy S. Davis at 217/782-6761.

Sincerely,

Mark A. Haney, Manager  
Facilities Compliance Unit  
Compliance Monitoring Section  
Division of Land Pollution Control

MAH:CD:ba/1059f/19

cc: Division File  
Northern Region  
Paul Jagiello  
Jeannine Balsamo  
Compliance Corr. Log (Cindy Davis) ✓  
USEPA, Region V  
Rob Watson



217/782-6761

Refer to: 1978030004 -- Will Co.  
Lemont/Union Oil  
ILD041550567

January 10, 1986

Mr. D.W. Bruckert  
Union Oil Company  
Chicago Refinery  
Lemont, Illinois 60439

Mr. Leo D. Erchull  
Union Oil Company  
Chicago Refinery  
Lemont, Illinois 60439

Gentlemen:

The Agency is in receipt of your September 4, 1985 and October 2, 1985 responses to our August 5, 1985 Compliance Inquiry Letter. Your responses have been reviewed and resolve the apparent violation(s) of Section(s) 725.191(c), 725.193(d)(3)(A), 725.193(d)(3)(B), 725.193(d)(3)(C), 725.193(d)(3)(D), 725.193(d)(4)(A), and 725.193(d)(4)(B).

*Resolved in letter 4/1/86 to Union Oil*  
Violation 725.191(a)(1) will be considered outstanding until further data is gathered to determine the cause of MW-2's anomalous nature.

Comments numbered 8, 9, and 10 of Attachment B appear to be adequately addressed at this time. Comment number 2 of Attachment A, however, will remain unresolved until Union Oil can explain the total well depth discrepancy. The Agency is still waiting to hear the results of the October-November, 1985 attempt to remove the bailer from well SW-7.

If you have any questions, please contact Cindy S. Davis at 217/782-9801.

Sincerely,

Mark A. Haney, Manager  
Facilities Compliance Unit  
Compliance Monitoring Section  
Division of Land Pollution Control

MAH:CD:bjh/0028F/55

cc: Northern Region  
Jeannine Balsamo  
Rob Watson  
Paul Jagiello  
Cindy Davis  
Michelle Tebrugge



Union Oil Company of California  
Chicago Refinery  
Lemont, Illinois 60439  
Telephone (312) 257-7761

ENV 341-85

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NOV 25 1985  
WASTE MANAGEMENT DIVISION  
CHICAGO DIST. CONFIDENTIAL



CERTIFIED MAIL  
RETURN RECEIPT REQUESTED  
#P 330 175 799

(5)

A. J. Eliskains  
Manager, Chicago Refinery

November 22, 1985

Mr. Willaim E. Muno  
RCRA Enforcement Section, SHE-12  
U.S. Environmental Protection  
Agency  
Waste Management Division  
230 South Dearborn Street  
Chicago, Illinois 60604

Dear Sir:

Request for Additional Information

In reply to your letter (received November 4, 1985,) requesting additional information from Union Oil pursuant to paragraph 3007 of the Resource Conservation and Recovery Act, we are supplying all the requested information from Enclosure 1 with this submission.

1. The RCRA land disposal units found at our facility are a land treatment area (process code D81) and a surface impoundment (process code S04). The units are identified on the attached copy of a topographic map.
2. Since all above facilities are in compliance with the November 8, 1985, certification of compliance with all applicable groundwater monitoring and financial responsibility requirements, no further response is necessary to questions 2-4 as shown on Enclosure 1.

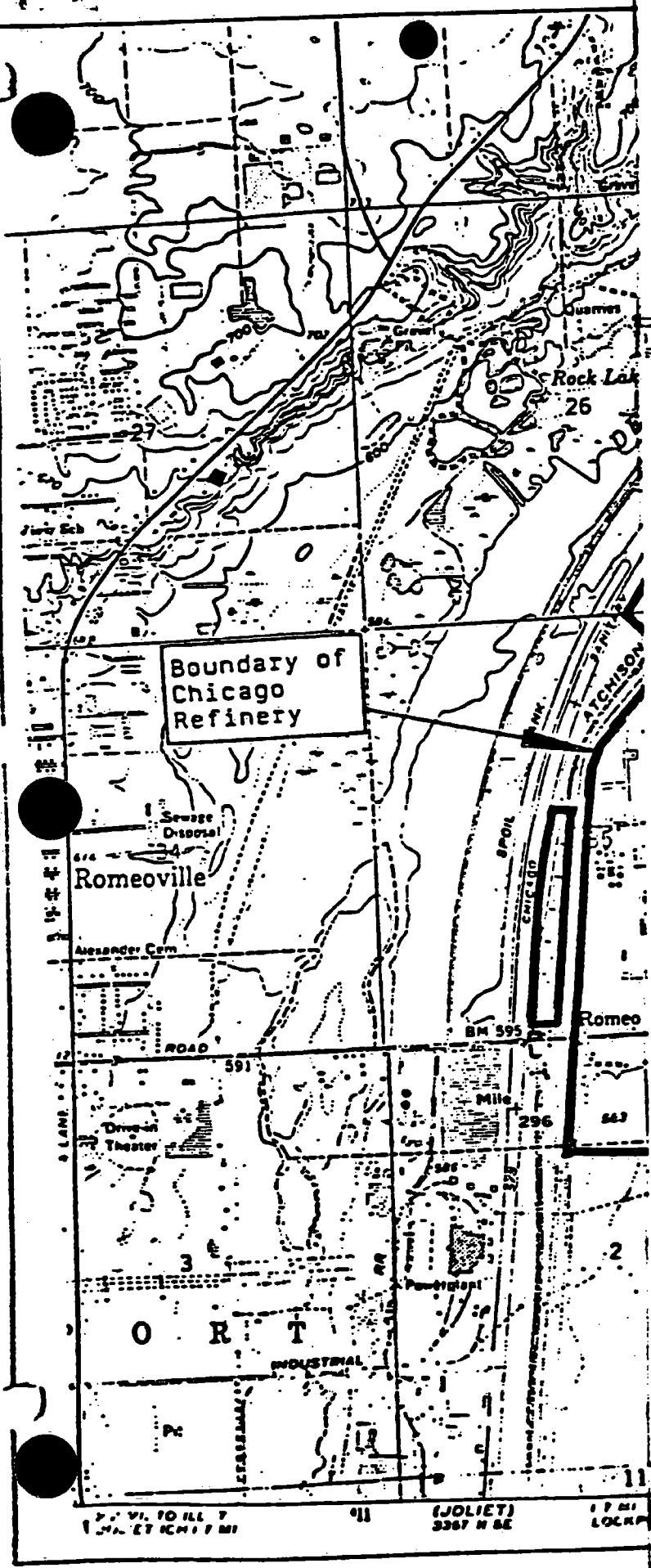
Should you have any questions concerning this submittal, please contact L. D. Erchull at the above telephone number.

Very truly yours,

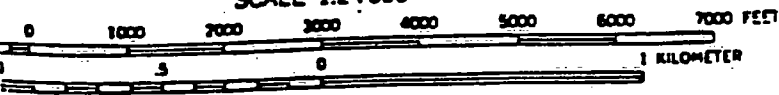
*D. W. Bruckert*  
D. W. Bruckert, Supervisor  
Environmental Services

LDE:dlw

Enclosure



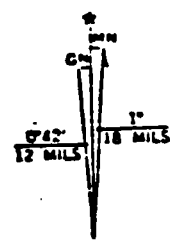
SCALE 1:24 000



CONTOUR INTERVAL 10 FEET  
 DOTTED LINES REPRESENT 5-FOOT CONTOURS  
 NATIONAL GEODETTIC VERTICAL DATUM OF 1929


ROMEOVILLE QUADRANGLE  
 ILLINOIS  
 7.5 MINUTE SERIES (TOPOGRAPHIC)

1962  
 PHOTOREVISED 1973 AND 1980  
 DMA 3367 II NE-SERIES V863

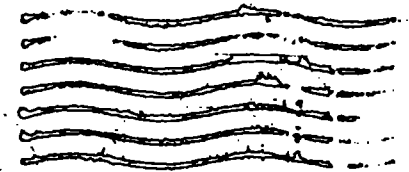


UTM GRID AND 1980 MAGNETIC NORTH  
 DECLINATION AT CENTER OF SHEET

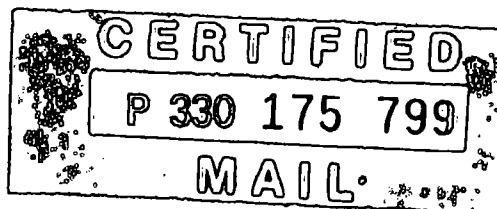
= Land Treatment Area  
 = Surface Impoundment

FACILITY LOCATION MAP		FIGURE A-1
 ERM-North Central Inc.		

Union Oil Company of California  
Chicago Refinery  
Lemont, Illinois 60439



UNION 



Mr. Willaim E. Muno  
RCRA Enforcement Section, SHE-12  
U..S. Environmental Protection Agency  
Waste Management Division  
230 South Dearborn St.  
Chicago, IL 60604

*response to 8/5/85 CIL*

Union 76 Division: Eastern Region

Union Oil Company of California

Chicago Refinery

Lemont, Illinois 60439

Telephone (312) 257-7761

ENV 234-85



CERTIFIED MAIL

RETURN RECEIPT REQUESTED

#PO8 8720483

RECEIVED

A. J. Eliskalns  
Manager, Chicago Refinery

August 19, 1985

AUG 22 1985

IEPA-DLPC

Mr. Mark A. Haney, Manager  
Facilities Compliance Unit  
Compliance Monitoring Section  
Illinois Environmental Protection  
Agency  
Division of Land Pollution Control  
2200 Churchill Road  
Springfield, Illinois 62706

Dear Sir:

RE: 1978030004 - Will County  
Lemont/Union Oil ILD041550567  
Compliance Inquiry Letter Response

Union Oil has reviewed your August 5, 1985 compliance inquiry letter and has prepared responses to the Attachment A comments and/or questions posed by the Illinois Environmental Protection Agency.

A response to Attachment B will be prepared and sent to IEPA by September 6, 1985. We suggest that after IEPA has reviewed the contents of our responses to Attachment A and B, a meeting between representatives of Union Oil and the Agency be scheduled to discuss resolution of any outstanding and unresolved issues. Additionally, although our submittals only respond to comments and/or questions contained in Attachments A and B, we suggest that our meeting also address IEPA comments and/or questions contained in Attachment C. This will allow Union Oil to prepare some preliminary groundwork for responses to Attachment C which are due to be submitted to the IEPA 30 days after Union returns to its detection monitoring program.

Mr. Mark A. Haney  
August 19, 1985  
Page 2

For your convenience and to aid in your review, Union Oil has repeated the IEPA comments and/or questions and provide our response immediately below.

Should you have any questions concerning our response, please direct them to L. D. Erchull at (312) 257-7761.

Sincerley,

A handwritten signature in dark ink, appearing to read "D. W. Bruckert". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

D. W. Bruckert, Supervisor  
Environmental Services

LDE/rm

Attachment



ATTACHMENT I

RECEIVED

AUG 22 1985

RESPONSES TO IEPA ATTACHMENT A

DLPC

1. IEPA COMMENT

Pursuant to 35 Ill. Adm. Code 725.191(c), the annular space above the sampling depth must be sealed with a suitable material to prevent contamination of samples and the groundwater. The concrete surface seals in several of the MW-series wells lacked the integrity necessary to prevent the downward migration of contaminants. These seals must be repaired or replaced.

RESPONSE

35 Ill. Adm. Code 725.199(c) required that the annular space above the sampling depth be sealed with a suitable material (e.g., cement grout or bentonite slurry) to prevent contamination of samples and the groundwater. At the Union Oil facility, the annular space in the wells are typically sealed with 1-3 feet of bentonite above the sand pack that surrounds the well screen, low permeability natural silty/clay backfill to a depth of 2-3 feet below the ground surface, and a cement grout plug from the natural backfill to the ground surface. With time, we have found that it is not unusual for the cement grout to crack. This is particularly true after a severe winter, and we believe the deterioration of the concrete grout plug is due primarily to freeze - thaw action. As a consequence, Union Oil has on numerous occasions repaired or replaced the concrete plug when deterioration was observed, and will again repair or replace the concrete plug on wells where deterioration has occurred. At the present time, we have replaced the concrete plug on the following wells: MW-2, MW-3, MW-4, MW-5, MW-6, MW-8, SW-4, SW-5 and SW-8. Wells MW-1, SW-1 will be completed as soon as possible depending on access to the site. At present, the field is too wet for access.

It should be noted however that we believe the existing bentonite and natural clay/silt backfill seals provide a more than adequate seal then the concrete surface seals to prevent contamination of the samples or ground water due to the infiltration of surface water.

2 IEPA COMMENT

The total well depth of SW-7, as measured during the inspection, was 21.22 ft. shallower than the boring log. Please explain this discrepancy.

RESPONSE

Inspection of the boring log and well construction diagram for SW-7 (Attachment 2) shows simply that the well was not installed to the bottom of the investigative boring. It is believed that the reason for this was due to an overnight rise in the water level and the desire to install the top of the well screen at the top of the perched water level. It is interesting to note that the IEPA water levels (Attachment 3) show that the well was dry on 6-24-85. Therefore, it may have been appropriate to install a 30 or 40 foot long well screen to the bottom of the investigative boring. It is more likely, however, that many of the perched water zones underlying the Union Oil facility are seasonal in occurrence. This is a typical geologic occurrence and should not be unexpected.

607 2-MS

ATTACHMENT 2





















SW-7 BORING LOG AND WELL CONSTRUCTION DIAGRAM

T. M. GATES, INC.				TEST BORING LOG & MONITORING WELL INSTALLATION				WELL NO. SW-7	
PROJECT UNION OIL SUPPLEMENTAL WELLS								SHT. NO. 1 OF 3	
CLIENT UNION OIL COMPANY								PROJ. NO. 84-01-008	
BORING CONTRACTOR CANONIE CONSTRUCTION COMPANY								GROUND ELEV. 703.47	
GROUND WATER		TOC-ELEV. 706.00'		CAS.	SAMP.	CORE	TUBE	DATUM MSL	
DATE	TIME	ELEV.	CASING	TYPE	H.S.A.	S.S.		DATE START 3-21-84	
6-18-84		678.21		DIA.	6"	1 1/2"		DATE FINISH 3-22-84	
				WT.		140#		DRILLER J. HAYMAN	
				FALL		30"		TMG-REP. GJY	

DEPTH FT.	CASING BLOWS	SAMPLE NO.	BLOWS ON SAMPLE SPOON PER 6"	SYMBOL	IDENTIFICATION & REMARKS	
1						
2						
3						
4		S-1	4 7 10	C L	Brown silty clay, trace gravel, very stiff, moist	
5						
6						
7						
8						
9		S-2	6 9 13	C L	Same as above	
10						
11						
12						
13						
14		S-3	4 7 11	C L	Brown silty clay, trace gravel, stiff, moist	
15						
16						
17						
18						
19		S-4	4 7 10	C L	Dark gray clayey silt/silty clay, trace gravel, stiff, dense, moist	
20						
21						
22						
23						

RECEIVED  
 AUG 22 1985  
 REP-ADLPC

T. M. GATES, INC.				TEST BORING LOG & MONITORING WELL INSTALLATION		WELL NO. SW-7	
PROJECT UNION OIL SUPPLEMENTAL WELLS						SHT. NO. 2 OF 3	
CLIENT UNION OIL COMPANY						PROJ. NO. 84-01-008	
DEPTH FT.	CASING BLOWS	SAMPLE NO.	BLOWS ON SAMPLE SPOON PER 6"	SYMBOL	IDENTIFICATION & REMARKS		
24		S-5	4	C	Gray-brown silty clay, very stiff, moist; overlying brown silty clay, firm, moist; overlying tan fine sandy clayey silt, somewhat dense, wet; overlying poorly graded fine to medium grained sand, very wet		
			6	L			
			14	M			
25				L			
			S				
26			S				
			S				
27			C				
28		S-6	10	S	Light brown fine to medium grained sand, loose, very wet; overlying light brown fine sandy silty clay, soft, saturated; overlying rock fragments; overlying light brown silty clay, stiff, moist		
29			30	M			
			21	L			
30				L			
31							
32							
33							
34							
34		S-7	5	C	Dark gray silty clay, stiff, trace gravel, trace sand, very wet		
			8	L			
			10				
35							
36							
37							
38							
39							
39		S-8	21	S	Chalk white-gray silty fine sand, limestone rock fragments, wet		
			50	M			
40							
41							
42							
43							
44							
45							
45		S-9	50/4"		Gray silty rock fragments, wet (limestone) Auger no sample 43'-67' Same lithologic description as adjacent MW-7		
46							
47							
48							
49							



T. M. GATES, INC.				TEST BORING LOG & MONITORING WELL INSTALLATION		WELL NO. SW-7	
PROJECT UNION OIL SUPPLEMENTAL WELLS				SHT. NO. 3 OF 3			
CLIENT UNION OIL COMPANY				PROJ. NO. 84-01-008			
DEPTH FT.	CASING BLOWS	SAMPLE NO.	BLOWS ON SAMPLE SPOON PER 5"	SYMBOL	IDENTIFICATION & REMARKS		
50					Same lithologic description as adjacent MW-7		
51							
52							
53							
54							
55							
56							
57							
58							
59							
60							
61							
62							
63							
64							
65							
66							
67		E.O.B.			<u>WELL CONSTRUCTION</u>  Washed concrete sand backfill: 67'-47' 0.006 in. slot PVC screen: 47'-27' Washed concrete sand: 47'-24' Bentonite pellet seal: 24'-23' Native clay backfill: 23'-2' Concrete plug: 2'-0'  -Height of steel protective casing above ground surface is 2.53 feet. -Well developed by bailing at least 5 times the volume of water in the well.		
68							
69							
70							
71							
72							
73							
74							
75							

ATTACHMENT 3

IEPA 6-24-85 WATER LEVEL MEASUREMENTS

6-24-85

6-24-85

Stick-Up	Depth to water	Total Depth	Water Elevation	Bottom Elevation	Difference in Total Depth from original borings	
SW1 (GT01)	3.26	3.07	23.79	713.92	693.2	.7
SW4 (GT04)	2.17	54.22	55.90	641.40	639.5	.9
SW5 (GT05)	1.83	15.30	34.04	668.16	649.42	1.48
SW7 (GT07)	2.34	26.37	26.54	673.78	673.62	21.22
SW8 (GT08)	2.02	27.39	30.83	641.21	637.77	.63
SW9 (GT09)	1.81	12.39	34.72	711.24	688.91	.71

- Depth to water measured with designated bailer in place

RECEIVED

AUG 22 1985

IEPA-DLPC

RECEIVED

JUL 26 1985

IEPA-DLPC



JUN 12 1985

5HS-13

Lawrence W. Eastep, Manager  
Permit Section, DLPC  
Illinois EPA  
2200 Churchill Road  
Springfield, Illinois 62706

RE: Corrective Action Response Review  
Union Oil Company of California  
ILD 041550567

Dear Mr. Eastep:

Enclosed is a copy of information we received from the referenced facility, addressing the "continuing release" provisions of the Hazardous and Solid Waste Amendments of 1984. Please review this information, and complete the enclosed form entitled "RCRA Facility Review for Solid Waste Management Units." We also encourage you to provide us any and all additional information that is pertinent to a consideration of continuing releases at this facility. We will take no final actions concerning this facility without your full participation in the decision-making process.

We ask that you return the completed form, plus any additional information to us (1) within two weeks of your receipt of this letter, for facilities which have indicated "no releases", and (2) within four weeks for facilities which have indicated prior or continuing releases of any kind.

Please feel free to call the previously identified permit writer during the progress of your review with any questions or comments.

Sincerely yours,

Edith M. Ardiente, P.E.  
Chief, Technical Programs Section

Enclosure(s)

5HS-12:H.Witschonke:6/5/85

INITIALS	TYPIST	AUTHOR	STU #1 CHIEF	STU #2 CHIEF	STU #3 CHIEF	TPS CHIEF
	FK/5/85		cm/6/5/85 6/5/85			6/7/85 6/10/85
DATE						

206-35



P 557 098 112

# RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED  
NOT FOR INTERNATIONAL MAIL

(See Reverse)

★ U.S.G.P.O. 1983-403-517

Sent to	
H.D. Haas, Supervisor of	
Env. Services	
Union Oil Co. of Cal.Chgo.Ref.	
Street and No.	
135th Street and New Avenue	
City, State and ZIP Code	
Lemont, Illinois 60439	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return receipt showing to whom Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date	

PS Form 3800, Feb. 1982

H. Witschonke: SHS-12: STU#1: ILD 041550567

PS Form 3811, July 1983

<p><b>SENDER: Complete items 1, 2, 3 and 4.</b></p> <p>Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.</p>	
<p>1. <input checked="" type="checkbox"/> Show to whom, date and address of delivery.</p> <p>2. <input type="checkbox"/> Restricted Delivery.</p>	
<p>3. Article Addressed to:</p> <p>H.D. Haas, Supervisor of Env. Ser. Union Oil Co. of California - Chgo.Ref. 135th Street and New Avenue Lemont, Illinois 60439</p>	
<p>4. Type of Service:</p> <p><input type="checkbox"/> Registered <input type="checkbox"/> Insured  <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD  <input type="checkbox"/> Express Mail</p>	<p>Article Number</p> <p>P557098112</p>
<p>Always obtain signature of addressee or agent and <b>DATE DELIVERED.</b></p>	
<p>5. Signature — Addressee</p> <p>X</p>	
<p>6. Signature — Agent</p> <p>X <i>Harry Ross</i></p>	
<p>7. Date of Delivery</p>	
<p>8. Addressee's Address (ONLY if requested and fee paid)</p>	

DOMESTIC RETURN RECEIPT

H. Witschonke: STU#1 SHS-12: ILD 041550567



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MAY 16 1985

WASTE BRANCH  
U.S. EPA, REGION V

Union 76 Division: East Region

Union Oil Company of California

Chicago Refinery

Lemont, Illinois 60439

Telephone (312) 257-7761 ENV 148-85

**union 76**

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED  
#P08 8720435

A. J. Eliskalns  
Manager, Chicago Refinery

May 13, 1985

RECEIVED  
5/16/85

Mr. Basil G. Constantelas  
Director, Waste Management Division  
U. S. Environmental Protection Agency  
230 South Dearborn  
Chicago, Illinois 60604

Dear Mr. Constantelas:

Waste Reduction Process

This letter is confirming a telephone conversation I had with Mr. Gale Hruska, USEPA, on May 8, 1985. Chicago Refinery is considering the use a process to physically separate a refinery residual into oil, water, and a listed hazardous waste. From my discussion with Mr. Hruska it is my understanding that a permit is not needed to use this process. It is requested that you review the information below and confirm this understanding in writing.

This process is called the Tracker Oil Recover Process. It is a pressure filtration system which breaks oil/water emulsions and separates oil and water from the waste solids by forcing the liquids through a pore size of 1 to 5 microns. The system is mobile and has complete on-site production capabilities. Attached are photographs of the system.

Union Oil is considering the use of the system to process a residual from a slop oil tank at Chicago Refinery. With the Tracker Process on-site near the tank, the residual would be pumped from the tank to the Tracker Process. Oil from the process will return to the Refinery and water will be treated in the Refinery's NPDES facilities. The solid filter cake (Slop Oil Emulsion Solids, K049) generated by the process is a listed hazardous waste. It will be disposed of off-site at an approved landfill.

We believe the Tracker Process is an environmentally sound process, since (1) It reduces the volume of a waste, (2)

Mr. Basil G. Constantelas

-2-

May 13, 1985

It produces a solid filter cake, and (3) Recovers oil which can be used for a beneficial purpose.

I, therefore, request that USEPA review this information as expeditiously as possible and confirm in writing, to my attention, that a permit is not required to use the Tracker Process.

Very truly yours,

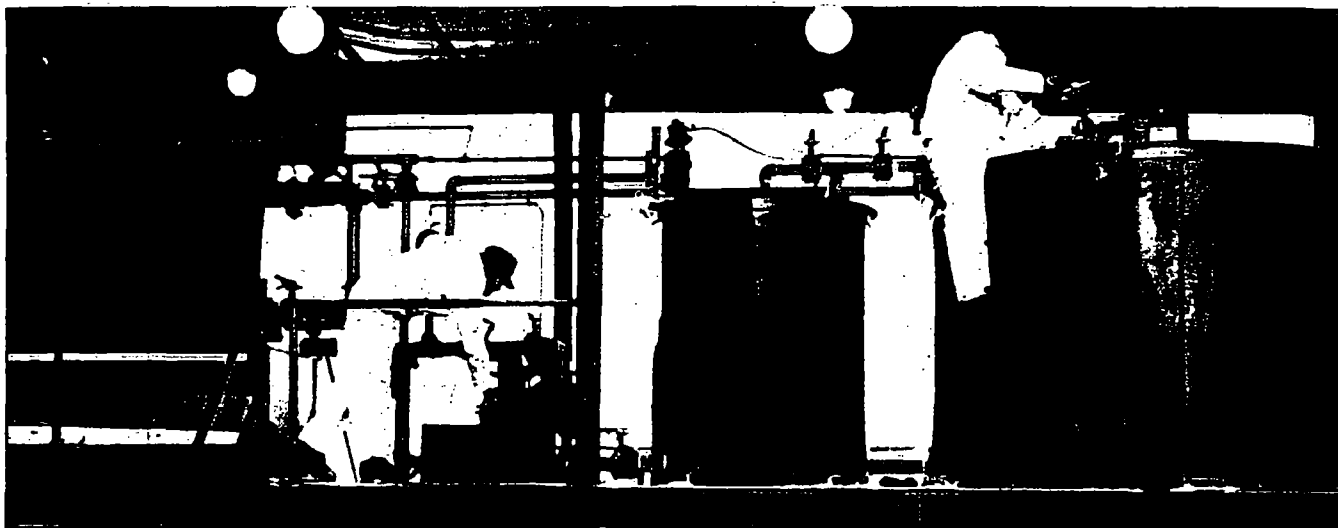


D. W. Bruckert, Supervisor  
Environmental Services

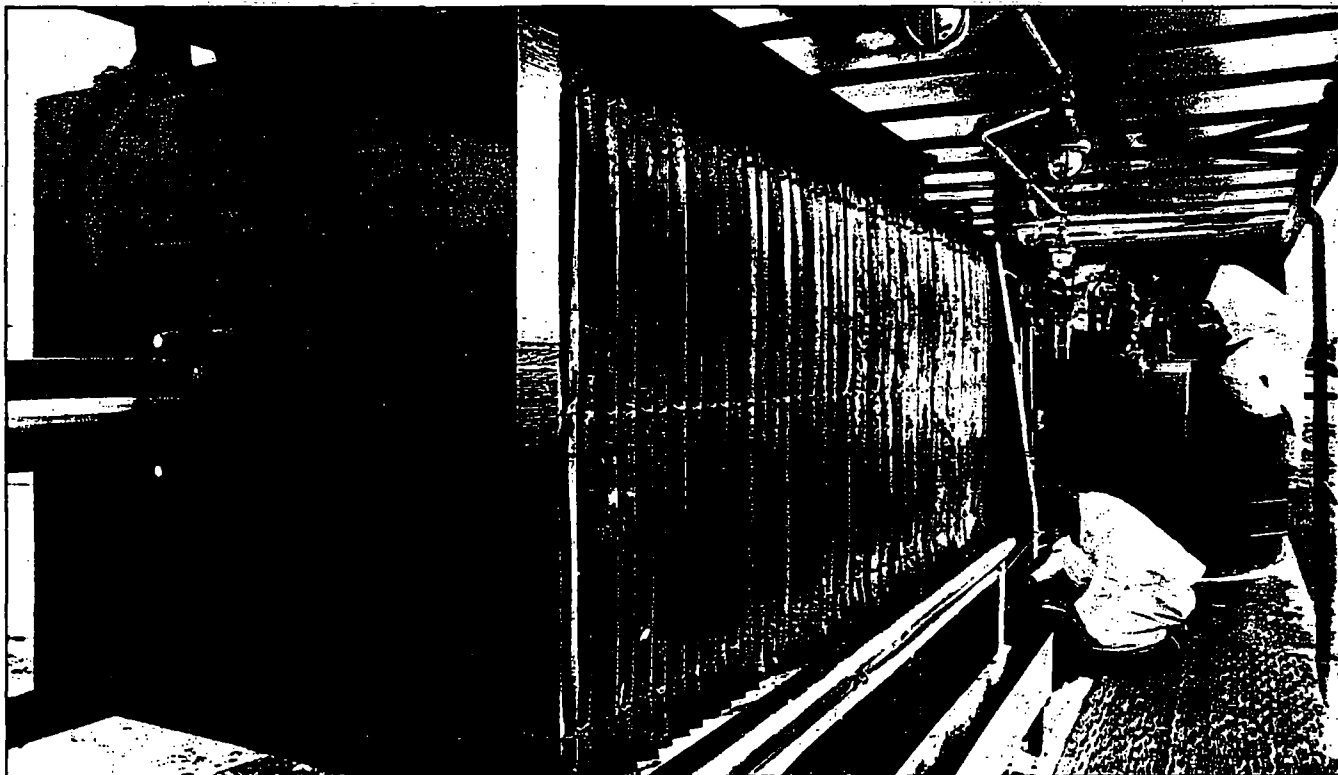
DWB/ms

cc: Eugene Theios - IEPA

Attachment



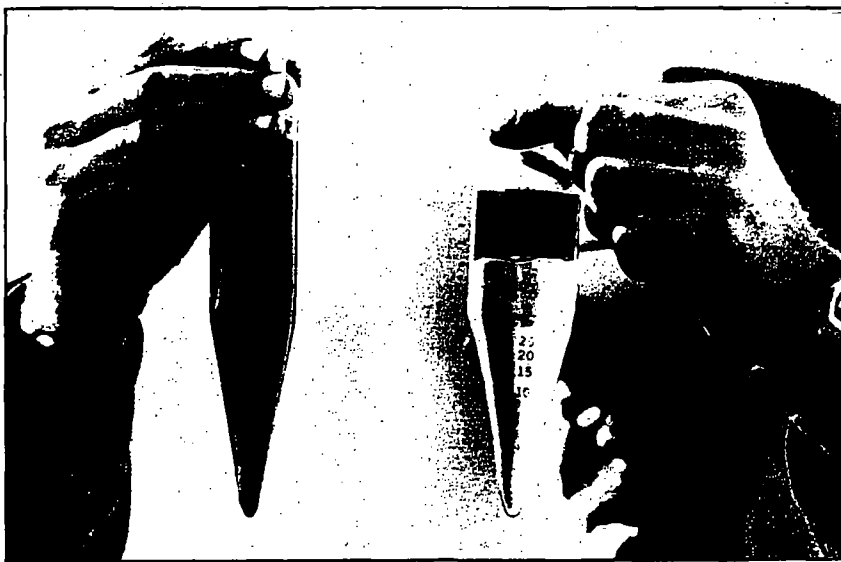
*Mobile system provides complete on-site, explosion proof, self-powered production capabilities.*



*Patent pending process combines conventional equipment technology with a proprietary chemical conditioning of the process stream.*



*Non-leaching and non-igniting consolidated residue.*



*Removal of solids to pipeline quality.*

MAY 30 1985

5HS-12

**CERTIFIED MAIL #P246 373 457**  
**RETURN RECEIPT REQUESTED**

D.M. Bruckert, Supervisor  
Environmental Services  
Union Oil Company of California  
Chicago Refinery  
Lemont, Illinois 60439

Re: Waste Reduction Process  
ILD 041550567

Dear Mr. Bruckert:

We have reviewed the Tracker Oil Recovery Process described in your letter of May 13, 1985, with respect to its regulatory status under the provisions of the Resource Conservation and Recovery Act (RCRA). Our analysis is as follows.

The waste described as "residual from a slop oil tank" appears to meet the definition of slop oil emulsion solids from the petroleum refining industry (K049). Therefore, storage of the material prior to recycling is regulated -40 CFR 261.6(b). The actual reclamation, in the Tracker system, is excluded from regulation.

Three materials are generated as a result of the Tracker process: filter cake, water, and oil. The filter cake remains a listed hazardous waste (K049) and must be managed in accordance with the regulations given in 40 CFR Part 264. The water generated in the process remains a hazardous waste under 40 CFR 261.3(c), and any storage prior to treatment in a NPDES permitted unit is regulated. The waste oil recovered from the Tracker process is presently exempt from regulation. However, on January 11, 1985, U.S. EPA proposed new regulations regarding the use of waste and off-specification oil. In addition, on May 13, 1985, the Agency requested public comment on the need for regulation of "oils that are recovered from hazardous wastes that are generated at a petroleum refinery and which recovered oils are fed back to the petroleum refinery for processing". (Copies of the Federal Registers are enclosed). Therefore, though the use of the oil is presently exempt from regulation, it may come under regulation in the near future, and your decision on whether to utilize the Tracker process should take this possibility into account.

If you have further questions regarding this issue, please contact Gale Hruska at (312) 886-0989.

Sincerely yours,

Edith M. Ardente, P.E.  
Chief, Technical Programs Section

cc: Larry Eastep, IEPA  
Rob Watson, IEPA

5HS-12:G.Hruska:fr:5/22/85

INITIALS

DATE

TYPIST

AUTHOR

STU #1

STU #2

STU #3

TPS

WES

FR

GRK

CHIEF

CHIEF

CHIEF

CHIEF

CHIEF

5/22/85

5/23/85

5/24/85

LD  
5/24/85

5/24/85





Illinois Environmental Protection Agency · 2200 Churchill Road, Springfield, IL 62706

---

217/782-6761

Refer to: 19784030004 -- Will County  
Lemont/Union Oil  
ILD041550567

April 22, 1985

Mr. W. D. Bruckert  
Union Oil Company  
Chicago Refinery  
Lemont, Illinois 60439

Dear Mr. Bruckert:

The Agency is in receipt of your March 22, 1985 response to our Compliance Inquiry Letter. Your response has been reviewed and resolves the apparent violation(s) of Section(s) 725.194(a)(2).

If you have any questions, please contact Michelle Tebrugge at 217/782-4462.

Sincerely,

A handwritten signature in dark ink, appearing to read "Mark A. Haney", written in a cursive style.

Mark A. Haney, Manager  
Facilities Compliance Unit  
Compliance Monitoring Section  
Division of Land Pollution Control

MAH:MDT:tk/42

cc: Division File ✓  
Northern Region  
Gary King  
Don Gimbel  
Dale Helmers  
Michelle Tebrugge

listed  
as Union Oil

disposal  
facility

Union 76 Division: Eastern Region

Union Oil Company of California

Chicago Refinery

Lemont, Illinois 60439

Telephone (312) 257-7761

ENV 16-86

ILD 041 550 567



CERTIFIED MAIL  
RETURN RECEIPT REQUESTED  
#P 330 175 823

RECEIVED

JAN 27 1986

SWB - AIS  
U.S. EPA, REGION V

January 20, 1985

U.S. Environmental Protection  
Agency  
RCRA Activities  
Region V  
P.O. Box A3587  
Attention: ATKJG  
Chicago, Illinois 60690

Dear Sir:

Letter Response

In reply to your attached undated letter, we provide the following information. The requested information has previously been sent to you on two occasions. Please refer to letter ENV 157-85, received by you on May 23, 1985, and Attachment 4 of letter ENV 223-85, received by you on August 14, 1985.

Should you have any further questions, please contact L. D. Erchull at the above telephone number.

Very truly yours,

D. W. Bruckert, Supervisor  
Environmental Services

LDE:dlw

Attachment

A. J. Eliskalns  
Manager, Chicago Refinery



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

230 SOUTH DEARBORN ST.  
CHICAGO, ILLINOIS 60604

DW BRUCKERT

JAN 20 1985

REPLY TO THE ATTENTION OF:

5HS-JCK-13

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

U.S. EPA ID #: ILD041550567

UNION OIL CO OF CALIF CHGO REFINERY  
135TH STREET & NEW AVE  
LEMONT IL 60439

RE: Hazardous Waste Permit Application

Dear Permit Applicant:

As you know, you have previously submitted Part A of the Resource Conservation and Recovery Act (RCRA) permit application for the above-referenced facility. Timely submission of "the Part A" has allowed most hazardous waste management facilities to continue to operate under RCRA "interim status" (or the State program equivalent), while complying with applicable technical and record-keeping standards.

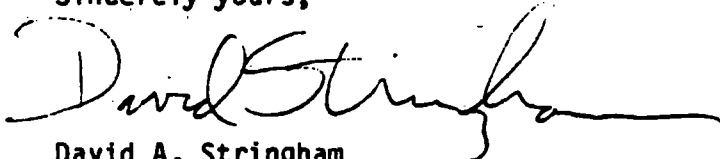
On November 8, 1984, the Hazardous and Solid Waste Amendments of 1984 (the 1984 Amendments) were enacted to modify RCRA. Under the 1984 Amendments, all RCRA permits issued after the date of enactment must provide for corrective action for all releases of hazardous waste or hazardous waste constituents from any solid waste management unit, regardless of the time at which waste was placed in the unit. In addition, all interim status facilities are subject to corrective action requirements, regardless of whether they have 1) submitted a Part B application, 2) submitted a closure plan, 3) reverted to generator status only, 4) actually closed, or 5) none of these. Unless our Agency has formally terminated the facility's interim status, the corrective action requirements apply. Please note that both hazardous and non-hazardous waste can meet the definition of solid waste under 40 CFR 261.2 (or the State regulation equivalent).

We must determine whether releases of hazardous waste or hazardous waste constituents have ever occurred at the facility site. If they have, we must ensure that corrective actions either have been taken or will be taken to eliminate threats to public health or the environment. An important element in our decision process is the information that you provide on the enclosed certification statement. Please read it carefully and either sign it and return it, or return it unsigned with a cover letter of explanation, within 45 days of the date of this letter. At some point in time, public input will be sought to either confirm or deny information you provide, or information we gather on our own, concerning releases and corrective actions.

Please mail your response to the following:

RCRA Activities  
Region V  
P. O. Box A3587  
Attention: ATKJG  
Chicago, Illinois 60690

Sincerely yours,

A handwritten signature in cursive script, appearing to read "David Stringham", with a long horizontal flourish extending to the right.

David A. Stringham  
Chief, Solid Waste Branch

Enclosure

5AHWM

May 27, 1981

Mr. Darrell W. Bruckert  
Environmental Services  
Union Oil Company of California  
135th Street and New Avenue  
Lemont, Illinois 60439

Dear Mr. Bruckert:

In response to your request, enclosed is a copy of my trip report  
pertaining to the inspection Dr. Meyer and I conducted at your facility  
on May 21, 1981.

If you have any questions about this matter, please call me at  
(312) 886-6149.

Sincerely,

Robert L. Stone  
State Implementation Officer  
Waste Management Branch

cc: Hak Cho

5A&HMD:WMB:STONE:BESSIX:5/27/81



## TABLE

AKS 79 - 398M

CONTAMINANT	MAXIMUM ALLOWABLE CONCENTRATION (1) (mg/l)	CR-227-79 AIR DRIED STORM POND DREDGING, 8/27/79	
		Run #1	Run #2
Arsenic	0.50		
Barium	10.0	0.01	0.01
Cadmium	0.10	0.1	0.2
Chromium	0.50	0.01	0.01
Lead	0.50	0.05	0.05
Mercury	0.02	0.07	0.06
Selenium	0.10	0.0005	0.0005
Silver	0.50	0.05	0.05
		0.02	0.02

(1) "Hazardous Waste - Guidelines and Regulations and Proposal on Identification and Listing, "Federal Register", Vol. 43, No. 243 (December 18, 1978) pg. 58956.

Union 76 Division: Eastern Region  
Union Oil Company of California  
Chicago Refinery  
Lemont, Illinois 60439  
Telephone: (312) 257-7761

Henry D. Haas  
Supervisor, Environmental Services

Union 76 Division: Eastern Region  
Union Oil Company of California  
Chicago Refinery  
Lemont, Illinois 60439  
Telephone: (312) 257-7761

Darrell W. Bruckert  
Environmental Science Analyst

Received from Mr. Haas on May 21, 1981, by Robert Stone.

# State Geological Survey Division

Illinois Institute of  
**Natural  
Resources**

217/344-1481 Natural Resources Building  
615 East Peabody Drive  
Champaign, IL 61820

*Rec'd  
4-16-81  
J.R.*

April 10, 1981

Mesdames Rohde, Schmidt, Gusich and Keefer  
Old Orchard Lane  
Route #4, Box 102  
Lockport, IL 60441

SUBJECT: Union Oil Company, Toxic Grading Project and Tank Farm,  
DuPage Township, Will County

Mesdames:

I just received your letter of March 27, 1981, concerning the above site. I do not know exactly where in the 36 square miles of DuPage Township the site is located. However, in looking at the maps of the area I guess it to be in the NW $\frac{1}{4}$  of Section 35, and adjacent parts of Sections 25, 26 and 36, all in T. 37 N., R. 10 E.

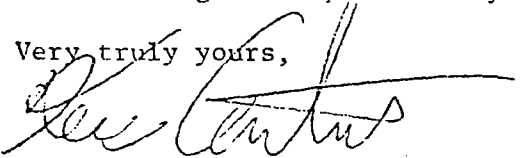
I am sending your letter to our field office in Warrenville, which is much more familiar with the geology in your area than I am. Please confirm the above location and contact either Jean I. Larsen or William G. Dixon at the following address:

Illinois State Geological Survey  
Northeast Illinois Field Office  
P. O. Box I  
Warrenville, IL 60555  
(312) 393-1466

The Geological Survey can provide you with basic geologic information about the site including what water-yielding materials are present at the site and in your subdivision, and general information on the potential for contamination in the area. We cannot design a monitoring well network or other such facilities; that must be done by a private consultant after discussions with the Illinois Environmental Protection Agency.

We will be glad to provide any assistance to you that we can.

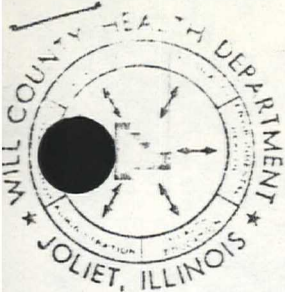
Very truly yours,



Keros Cartwright  
Geologist and Head  
Hydrogeology and Geophysics Section

cc: -Warrenville Office  
-Illinois Environmental Protection Agency  
-Illinois State Water Survey





# WILL COUNTY HEALTH DEPARTMENT

501 ELLA AVENUE • JOLIET, ILLINOIS 60433 • 815/727-8480

JAMES C. BARRINGER, Health Director

*Rec'd  
4-2-81*

April 1, 1981

Dawn Rohde  
Old Orchard Lane  
Route #4, Box 102  
Lockport, Illinois 60441

Re: Union Oil Company, Toxic  
Grading Project and Tank Farm

Dear Ms. Rohde:

This letter is in reference to your March 16, 1981 letter and I would just like to assure you that our file on this situation has not been closed.

We are in complete agreement with your position and our office is available to provide whatever services required to prevent a similar situation from happening at this site at any time in the future.

In closing, it is our opinion that the Illinois Environmental Protection Agency must assure all concerned that this site is not hazardous and will not contaminate the underground aquifer.

Please do not hesitate to call upon us when you feel that we can be of further help.

Very truly yours,

*James C. Barringer*  
James C. Barringer, Director  
Will County Health Department

JCB:dg

cc: Melva Schmidt  
Doris Gusich  
Jan Keefer

## BOARD OF HEALTH

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Lockport

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Plainfield

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